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# WOMEN'S INTERCOLLEGIATE ATHLETICS IN THE 

## UNITED STATES: A GEOGRAPHICAL

EXAMINATION
1971-1977

By

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#### Abstract

For the continuous daily support, love and devotion from the beginning of my life, I sincerely dedicate this study to my parents, Don and Marithta Rutherford. It is through their constant teaching, guidance, and utmost concern that they have shown me the beauty in life combined with learning. In special gratitude, my sincere thanks to my sister, Kaye Rutherford, who shared and enhanced all of these experiences.


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## CHAPTER I

## INTRODUCTION

"Perhaps all women athletes should be mountain climbers, because the plight of women in sports programs is clearly an uphill struggle (Dunkle, Women's Athletics Book, article 1 (1)."

For many years in the United States, there has been no sharper example of discrimination than that which operated against girls and women who took part in competitive sports, desired to take part, or would have if society did not scorn such endeavors. No matter what age, education, race, talent, or riches, the female's right to play competitive sports has been severely restricted. The funds, facilities, coaching, rewards, and honors allotted women is grossly inferior to those granted men. In many places absolutely no support was given to women's athletics, and females are barred from participation. A female who, despite handicaps and discouragements, persisted in her athletic interests was not likely to be congratulated on her sporting desires and grit. She was more apt to be subjected to social and psychological pressures, the effect of which was to cast doubt on her morals, sanity, and womanhood.

Athletics are a sensitive issue for many people. Athletics both reflect and perpetuate the ideas people have about what is right for boys to do and what is right for girls to do. Sex stereotypes are often deeply ingrained and confronting them head-on can be difficult.

Boys are supposed to be strong and aggressive, both physically and emotionally. Women, on the other hand, are supposed to be weak and passive, both physically and emotionally. So the myth goes, and myths die hard.

Why aren't women encouraged to participate in athletics? Gilbert suggests that the traits associated with athletics "excellence-achievement, aggressiveness, leadership, strength, swiftness, self-confidence--are of ten seen as being in contradiction with the role of women." ${ }^{2}$

The college woman, who cannot practice in her university's multi-million-dollar gymnasium, has no offer of financial assistance, finds equipment scarce and elderly, and must sell raffle tickets to pay travel expenses, exemplifies current conditions. There has been a publicly announced, publicly supported notion that sport is good for people, that sports develop better citizens, build vigorous minds and bodies, and promotes a better society. Yet many females of this country's population find that this credo does not apply to them. Perhaps the real problem is that some in our society believe only men are people and women are something less. ${ }^{3}$

But one need only look around to see that things are changing, which allows more and more women to break from tradition. The health and nutrition movement focuses on the body and is emphasizing the need for everyone to get exercise. As we can see through the media, women's liberation is opening up participation for women in many areas: economics, politics and sports. "The most positive sign of change," says Carol Gordon, Past President of the Association for Intercollegiate Athletics for Women (AIAW), "is that people are taking a critical look
at the situation and coming to grips with the idea of women's sports." 4 The Association of Intercollegiate Athletics for Women (AIAW) provides leadership for initiating and maintaining standards of excellence in women's intercollegiate athletic programs.

Title IX of the 1972 Education Act forbids colleges from discriminating against any person, including women, in any program, including athletics. The law reads, "No person in the United States shall be excluded from participation in, be denied the benefits of or be subjected to discrimination under any education program or activity receiving federal financial assistance . . . . ${ }^{5}$ The basic rules state that schools and colleges would not be required to spend equal amounts of money women's and men's athletics but would be barred from discrimination on the basis of sex. The final draft of new sex discrimination rules says that athletics may be provided through separate teams for males and females or through a single team open to both sexes. If separate teams are offered, a recipient institution may not discriminate on the basis of sex in providing necessary equipment or supplies, or in any other way; but equal aggregate expenditures are not required. ${ }^{6}$

The goal of the final regulations is to secure equal opportunity for males and females while allowing schools and colleges flexibility in determining how best to provide such opportunity. Where men are afforded opportunity for athletic scholarships, women also should be given the same opportunity.

The tentative regulations of Title IX passed in 1972 have been given to the Department of Health, Education, and Welfare, the federal agency that will enforce the regulations and make certain there is no
sexual discrimination in college athletics. The government has ordered HEW to scrutinize the tentative regulations and study them and then write a final series. These final regulations and their interpretations have been signed by President Ford and approved by Congress. The rules became effective July 21, 1975. Elementary schools have a one-year period to comply; high schools and colleges, three years. Because almost every college receives and requires federal money, few will have a choice other than to comply with Title IX. A violation in any program on campus conceivably could mean a loss of all federal funds for the school.

Many colleges across the United States did not wait for the final series of regulations from HEW. Women's athletic budgets are already being increased. The University of Washington, which in 1975 received more federal aid than any school except Massachusetts Institute of Technology, plans to spend almost $\$ 200,000$ on women's sports in 1975 , an increase of 2,000 per cent. For the 1973-74 school year, women's sports at Washington received $\$ 10,000$. Instead of 12 intercollegiate sports, only for men at University of Washington, there are now 22 intercollegiate sports for both men and women.?

The University of California at Los Angeles, has tripled its women's athletic budget from $\$ 60,000$ to $\$ 180,000$ in $1975-76$ and opened its formerly all male varsity teams to women.

The University of Kansas raised its women's athletic budget from $\$ 9,000$ to $\$ 121,000$ in 1975-76. The projected budgets for 1976-77 will definitely increase from the past year in all Big 8 institutions. For example, the University of Missouri budget was $\$ 60,000$ in 1975-76 and will be $\$ 170,000$ for 1976-77. Kansas State University's projected budget for $1976-77$ will be around $\$ 280,000 .{ }^{8}$

At the University of California, Berkeley, the men's budget in 1973 was $\$ 2.1$ million, $\$ 540,000$ of which came from student fees. The women's budget, all of which came from student fees was $\$ 50,000$, but that was 1,000 per cent higher than the $\$ 5,000$ received in 1974 . In 1975 the women's allocation from student fees was $\$ 127,000$ and the men's \$350,000.

At Michigan State University, the women's budget jumped from $\$ 34,000$ to $\$ 84,000$ between the $1972-73$ and 1973-74 academic years. Included in the new budget were services the men have always received: tutoring, medical treatment, a modern dressing room. Women athletic administrators were also moved to the field house which has traditionally been restricted to men.

The wemen's athletic program at the University of Pittsburgh, Pennsylvania in 1975 received $\$ 130,000$ from an estimated total athletic budget of $\$ 1.9$ million. At Penn State, a budget of about $\$ 2.7$ million has roughly $\$ 160,000$ earmarked for the women's athletic program. Both Pittsburgh and Penn State have initiated athletic scholarships for women. At Ohio State, women received $\$ 40,000$ last year out of a $\$ 6$ million athletic budget. In 1975 the women's budget has been raised to $\$ 83,000 .{ }^{9}$

Budgets for 1976-77 are definitely being increased for women all over the United States. The University of New Mexico will receive $\$ 480,000$ for their women's athletic budget. With schools trying to meet the regulations of title IX one sees, the women's athletic budgets increasing every year.

Disparities between the budgets for women and men are a central concern when evaluating an institution's athletic program. These disparities may take the form of differences in either the total amount of money spent on women's and men's sports or the amount of money allocated per sport for women and men. A study by Murphy in the Journal of Health, Physical Education and Recreation (October 1973) reported that the average annual budget for women's athletics at institutions was $\$ 8,905$, the average optimal budget for women's athletics was $\$ 21,000$. One can see from $1973-76$ the rapid increase in women's athletics budgets. ${ }^{10}$

It is likely that women's sports will require considerable budget increases to provide fair opportunities to women students, especially when new programs are being "geared up." However, it is unlikely that women's competitive sports will require, at least in the near future, the funds that men's sports now require.

In colleges and universities the intercollegiate sports programs have always fascinated some women. Perhaps the reason is they saw value in such participation even though it did not put the participant in the best social circles. Many women discontinued participation because of the undesirable social stigma. Sports were so circumscribed by prejudice and tradition that no one openly admitted to encouraging or engaging in this form of competition. It simply was not acceptable for women to become highly skilled in sports. "For so long it was believed the stresses and strains of all physical effort was somehow harmful to women, and it is a welcome change to have the American Medical Association support the value of vigorous activity for women. ${ }^{11}$

It is exciting to watch graceful, highly skilled women going all out to attain the goal they seek in athletic performance.

The research on women in sports seems to support a more realistic view of women's capabilities. The few energy cost studies which have been completed indicate that women are capable of a great deal more endurance, strength and all out effort than we previously have believed.

Researchers have found no evidence of physical, psychological, social, anatomical or personality harm in women who participate in highly competitive activities. Socially and culturally the barriers against women in sports seem to be beginning to disappear. In fact, so far as can be determined, there is no research evidence against intercollegiate programs for women. 12

Thus, what does Title IX mean for women? For the first time women will have an equal opportunity--from budget allocations, uniforms, travel, facilities, coaching, and number of scholarships. One can see that Title IX is a major breakthrough for women. Now women's sports programs do not have to rely on allocations from students' fees and the Department of Health, Physical Education and Recreation. Most important, Title IX opens the door of opportunity to many women who have excellent athletic skills, but who have not been given a chance to perform on an intercollegiate level or even with respectability at some institutions. Now a valuable experience can be added to the total education of women throughout the country. As a result of the HEW's guidelines, growth is expected in professional women's athletics and high school programs for women. Also, changes and advancements in the entire realm of athletics for women are expected.

Along with the advancement of women's athletics the change will also give women a shot at making the same mistakes as the men. Until now, there has not only been little athletic competition for women, but also no cut-throat recruiting and no big-time pressure competition. Such questions concerning the organization and administration of women's athletic programs have caused much confusion. Questions such as whether or not to offer scholarships, and if so, how and to whom and for how much. Other questions involve: coaching, scheduling, governing and regulating such athletic programs, additional financing and (possibly one of the touchiest)--how to co-exist with the men's programs. The Association of Intercollegiate Athletics for Women (AIAW) did not permit the granting of athletic scholarships for women until recently. The AIAW rejects the evils of pressure recruiting and performer exploitation which frequently accompany the administration of financial aid for athletics. However, in 1973, due to pressures from women's groups and some colleges, the AIAW's scholarship ban was lifted, although active recruiting is still forbidden.

Many women feel that the regulations requiring scholarships will raise the competitive level of women's athletics and at the same time will lower their grades and place undue pressure on them. Problems are arising concerning the governing of intercollegiate women athletics because as some women want to take advantage of the new act and use it as a manipulating tool to eliminate the superiority of the men's program. They would prefer to enhance their own program and bring it up to a respectable level, which would include a widely diversified program with quality competition.

What does Title IX mean for the men? There is much controversy. Some men favor the regulations of Title IX to upgrade the women's programs, while others fear that Title IX will destroy college athletics as it is today. Many feel that the HEW requirement is a threat to the intercollegiate program which might force some schools to do away with intercollegiate athletics entirely.

Other athletic directors take a more moderate position, recognizing that cuts will have to be made. Some men feel that the place to begin cutting would be with the men's scholarships and recruiting programs since they represent one of the biggest expenses in the men's program.

In 1974, the National Collegiate Athletic Association (N.C.A.A.) presented a position letter to HEW stating that they opposed the tentative regulations. The NCAA is objecting to HEW's demands to find new dollars for women's athletics. The NCAA has tried without success to obtain a Congressional waiver for big-money campus sports such as football and basketball. It claims these sports would be drained of their resources. At the present, N.C.A.A. wishes to take over A.I.A.W. and become the governing body for both men and women. A.I.A.W. rejects the proposal of N.C.A.A. and wishes to maintain its own governing body.

The major concern of the N.C.A.A. and the athletic directors is money. But HEW counters by saying that, "We are not trying to destroy athletics, we are just saying that athletic programs cannot discriminate. $"^{13}$ HEW is not requiring equal expenditures, only equal opportunities. Some men administrators feel that the regulations would put an economic burden on universities that could lead to the
failure of their intercollegiate athletic programs for both men and women. One answer to the shortage of funds caused by more money for women might be to eliminate the men's non-revenue-producing sports or, at least, cutback on their budget.

## FOOTNOTES

${ }^{1}$ Margaret C. Dunkle, "Equal Opportunity for Women in Sports," Women's Athletics' (Washington, D.C., 1974), p. 9.
${ }^{2}$ Gilbert Williamson, "Sport is Unfair to Women," Sports Illustrated (May 28, 1973), pp. 88-98.
${ }^{3}$ Richard Kazmaier, Sports Trail (Main, Sept.-)ct., 1973), pp. 3-15.
${ }^{4}$ Ellen Weber, Women's Sports (September, 1974), pp. 36-38.
$5_{\text {Barbara Hoepner, Women's Athletics: Coping with Controversy }}$ (Washington, D.C., 1974), pp. 64-68.
${ }^{6}$ Stillwater News-Press, "Equal Treatment for Men, Women Ruled in Sports" (Stillwater, Oklahoma, June 3, 1975), pp. 14-16.
$7_{\text {Kansas City Star, "Women's Intercollegiate Athletics" (Kansas City, }}$ Kansas, Nov. 17, 1974), pp. 14-17.
${ }^{8}$ Billie Jean King, "Revolution in Women's Sports," Women Sports (Sept., 1974), pp. 34-37.
${ }^{9}$ Ibid., pp. 38-40.
10 Elizabeth Murphy, "Status of Funding of Women's Intercollegiate Athletics, Johper (October, 1973), pp. 11-15.
${ }^{11}{ }_{\text {Hoepner }}$ et al., p. 65.
${ }^{12}$ Ibid., p. 72 .
${ }^{13}$ Frank Fuzak, "AIAW and NCAA," Woman Coach (Sept. 1974), pp. 11-15.

## A.I.A.W. - ASSOCIATION FOR INTERCOLLEGIATE <br> ATHLETICS FOR WOMEN

The purpose of this study was to geographically inventory and analyze the status of A.I.A.W. Women's Intercollegiate Sports during the period of 1971-1976. The inventory is prefaced by a brief historical review of women's sports, including reference to recent trends and issues. The sub-purposes of this study include:

1. Determination of the variation in the number of sports offered at each A.I.A.W. institution and the different variations of sports according to state and region (California may offer ten outdoor sports and South Dakota may offer five various indoor sports).
2. Determination of how many contests were played in each sport per state.
3. Measuring and mapping the degree and intensity of participation of a particular sport, for example, volleyball at a specific institution or state.
4. Measuring and mapping the national A.I.A.W. winners from 1971-1975.
5. Measuring budget data per student over numbered sports offered at each institution.
6. Measuring and mapping seholarships offered in each state and region, by sport.
7. The compiling of information from leading A.I.A.W. institutions which have been successful on the national level of competition will supplement the study.

Thus, an understanding of the variation characterizing women's sport participation between states and regions should accrue from this research.

Significance of the Study

Physical educators and the general public are becoming more aware of women's sports due to Title IX and A.I.A.W. Little research has been done on the historical and geographic aspects of sports for college women. The compiled data will enhance A.I.A.W.'s efforts in the development of further research useful to their program. In addition, it will provide A.I.A.W. a total perspective of A.I.A.W. member institutions and also help A.I.A.W. to determine if programs need to be upgraded or changed. The data will pinpoint current trends and enable universities and governing bodies to formulate policy on present and future programs.

Women athletes at both the high school and college level should benefit from this study. The information will provide them with data on the sports which characterize each geographical area. It will also give the prospective student athlete a guide to the best state and region for a particular sport, as well as provide data on financial aid.

## Limitations of the Study

The survey method has several weaknesses:

1. Survey information ordinarily does not penetrate very deeply below the surface.
2. Survey information may be subject to sampling error.

Another limitation which needs to be considered is the use of only A.I.A.W. member schools in this study. The researcher could not secure a sampling from the whole population. And as expected, a one hundred per cent return is unlikely.

There has been no geographically studies done relating to women's sports, thus, there is limited related literature.

## Definition of Terms

1. AIAW: "Association for Intercollegiate Athletics for Women is an official structure of the National Association for Girls and Women in Sport, of the American Alliance for Health, Physical Education, and Recreation. It provides a governing body and leadership for initiating and maintaining standards of excellence in women's intercollegiate athletic programs." (AIAW Handbook, 1976: 77) ${ }^{1}$
2. AIAW Member: The AIAW shall consist of institutional members and others who are willing to support the purposes as set forth in the Constitution. The various types of memberships and dues are: Active member, $\$ 500.00$ four year large schools; $\$ 350.00$ small schools; $\$ 200.00$ junior colleges; Associate member $\$ 100.00$ and Affiliate member \$50.00.
3. Title IX: The Education Amendments Act of 1972 has broad implications for the treatment of women in athletic and sports programs. The key section of Title IX reads: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving federal financial assistance. $"^{2}$ (Margaret Dunkle) ${ }^{2}$
4. NAGWS: National Association for Girls and Women's sports have been responsible for standardizing playing rules and official's ratings.
5. Regions: A.I.A.W. is divided into nine regional governance areas in the United States:
a. Eastern
b. Southern
c. Southeastern
d. Southwest
e. Midwest
f. "Region 6" - AIAW
g. Intermountain
h. Western
i. Northwest College Women's Sports Association
6. State Tournament: Competition from within the state to - determine which team will quality for regionals.
7. Regional Tournament: The competition of state team winners from within one region resulting in a winner who shall attend the national tournament.
8. National Tournament: The nine regional winners in the United States who come together to compete for the National Title.
9. Athlete: A highly skilled person engaged in sport.
10. Intercollegiate: Competition between colleges or representatives of different colleges.

Design and Methodology

Methodology

Survey research has been the method of research for this study. Survey research has contributed much to the methodology of the social sciences. Its most important contribution, perhaps, has been to vigorous sampling procedures, the overall design and the implementation of the design of studies, the unambiguous definition and specification of the research problem, and the analysis of data.

Survey research analyzes large and small populations (or universes) by selecting and studying samples chosen from the populations to discover the relative incidence, distribution, and interrelations of sociological and psychological variables. Surveys covered by this definition are often called sample surveys, probably because survey research developed as a separate research activity, along with the development and improvement of sampling procedures. Surveys, as such, are not new. Social welfare studies were done in England as long ago as the eighteenth century.

According to Kerlinger: 3
In survey research the researcher wants to know something about $U$, the universe. Only rarely does one study whole populations $\dot{q}$ they study samples drawn from populations. Sample surveys attempt to determine the incidence, distribution, and interrelations among sociological and psychological variables. Although the approach and the techniques of survey research can be used on any set of objects that can be well defined, survey research focuses on people, the vital facts of people, and their beliefs, opinions, attitudes, motivations and behavior.

4
According to Scott: ${ }^{4}$
The survey may be considered a research medium if it meets certain criteria. For example, it may use valid sources and pertinent, valid, reliable, and accurate methods, techniques, and tools-mand thus yield acceptable data for the interpretative and generalizing processes. In many surveys it is possible to see, find, and report all pertinent facts.

Scott also lists 10 steps to follow in using the survey as a research medium :

1. Studying Situation and Problem
2. Formulating Purposes
3. Considering Type, Scope, and Nature
4. Securing Cooperation
5. Selecting Participating Personnel
6. Finding Sources of Data
7. Collecting Data
8. Interpreting Data
9. Preparing the Survey Report
10. Estimating Effectiveness

Best states that: ${ }^{5}$

The survey is an important type of research. It must not be confused with the mere clerical routine of gathering and tabulating figures. It involves a clearly defined problem and definite objectives. It requires expert and imaginative planning, careful analysis and interpretation of the data gathered, and logical and skillful reporting of the findings.

The researcher's survey was mailed to the Director of Women's

Intercollegiate Sports program of each of the 360 members of the
1973-74 AIAW Directory. The survey was designed to obtain reliable
data from all AIAW member schools concerning their Women's Intercollegiate Sports program. As a complement to the study, letters were sent to the national winning AIAW institutions to collect case studies concerning the philosophy on the various sports and the levels of competition.

## Procedure

A letter explaining the study, along with a questionnaire was mailed to the Director of Women's Intercollegiate Sports program of each of the charter members of the 1973-74 AIAW Directory. (Appendix A) The questionnaire was to obtain the following information: (1) sports per school; (2) contests per school for each sport; (3) length of season for each sport; (4) hours of participation for each school; (5) regional and national participation; (6) scholarships; and (7) budget. A letter was sent to each of the seven sports advisory committees to collect state, regional and national tournament results for each sport. AIAW and AAHPER were contacted by mail and telephone regarding requests for the National results of badminton, basketball, golf, gymnastics, swimming and diving, track and field, softball, field hockey and volleyball from 1971 to 1977 , and a list of all AIAW schools who offered scholarships. A letter was sent to the top four AIAW National (1974-75) contenders of each sport to collect data concerning their opinions regarding their success, Questions asked were:
(1) history and background of a specific sport; (2) reasons for being a national wimaer, such as coaches, money, interest, and players; (3) location and climate; (4) recruiting; (5) scholarships; (6) budget, (7) school emphasis and (8) reputation of the institution in a sport.

A brief historical review of the development of Women's Intercollegiate Sports from 1900 to 1976 was presented to demonstrate the growth and changes concerning Women's Intercollegiate sports over the years. Information obtained from current available historical literature was used to support the data obtained for the purpose of this study. The data was presented cartographically by using various types of mapping procedures. This allows the interpreter to compare states and regions according to: (1) the degree of participation of a particular sport; (2) the level of interest by state and region for all sports surveyed in question four of the survey; (3) the state, regional and national winners of AIAW from 1971-77 in various sports surveyed in six, seven, and eight; (4) respondents ${ }^{\natural}$ opinion of most successful sport, and compared hours involved in sport, number of season contests by using a ratio measure; (5) the budget data per student over numbered sports per institution; (6) scholarships offered in each state and region by sport. Summary and conclusions of the results concerning Women's Intercollegiate sports were interpreted and developed according to various mapping procedures and ratio measurements within states, regions and at the national level.

1
AIAW Handbook of Policies and Operating Procedures-1976-1977. Washington, D.C.: American Alliance for Health, Physical Education, and Recreation, 1976.
${ }^{2}$ Margaret Dunkle, "Equal Opportunity for Women in Sports," Women's Athletics (Washington, D.C., 1974), pp. 9-19.
${ }^{3}$ Fred Kerlinger, Foundations of Behavioral Research (New York, 1973) , pp. 410-423.
${ }^{4}$ William Scott, Evaluation in Research (New York; 1973), pp. 41-67•
$5_{\text {John Best, Research in Education (New Jersey, 1970), pp. 116-139. }}$

## A BRIEF HISTORY OF WOMEN IN SPORT

The study or evaluation of Women's Intercollegiate Sport has gained interest. Sport for Women has encompassed activities ranging from simple recreational pastimes once deemed appropriate for women's participation to present high level international competition. What was primarily a spontaneous, self-directed endeavor has now become a well organized program. At this time millions of American women engage in organized sports, some of which are strenuous, adventurous, and highly competitive.

This particular research is concerned with only one aspect of American sport, women's intercollegiate sport. The historical literature however, must also be examined properly to comprehend the present women's intercollegiate scene.

History and Sport

The American Sportswoman essentially is a twentieth century phenomenon. At the turn of the century the ideal woman was portrayed as the matron: mother, housekeeper and cook. A woman's body was meant not only to be beautiful but also productive outside the realm of home. Her evoluation has been controversial in the public mind due to the place of the American sportswomen in society, and a review of her creation will closely parallel the history of our American culture.

The era from 1833-1890 had been a special time in the founding of women's colleges. At that time there was a great resistance to the idea of sport and education for women. After all, delicacy was the accepted life style for women. Victorian women were described as delicate, not by nature, but by design. These delicate women were expected to remain indoors and pursue such feminine pastimes as embroidery and painting on glass. When Matthew Vassar and later, Henry Durant wished to provide education for women equal to that of men, they first had to demonstrate the mental and physical capacity of these inferior females. Therefore, a lady physician was appointed in hygiene, physiology, and anatomy. Exercises were regularly conducted for women in which participation was encouraged, or perhaps; required. Organized sports for women, then, was initiated as part of the larger plan to produce healthy young females capable of engaging in higher

In 1865, Vassar had explained his beliefs about physical education.
Good health is essential to the successful prosecution of study. In the education of women, this is a consideration of peculiar importance . . . because of the peculiar delicacy of their physical organization, rendering it specially liable to derangement from neglect or misuse. ${ }^{2}$

He planned a special School of Physical Training to give instruction in riding, flower-gàdening, swimming, boating, and skating, and other physical accomplishments "suitable for ladies to acquire, and promotive of bodily strength and grace." The physical training school, housed in the Calisthenium, contained the Riding School, gymnasium, and bowling alley.

Ten years later when Durant founded Wellesley College, he had followed Vassar's pattern. Durant believed that young women could do their best mental work if it were balanced by physical activity. Durant bought boats for rowing during the fall and spring, and he encouraged ice skating in the winter. Unable to purchase tennis equipment in this country, he imported it from England.

Goucher, founded in 1885, followed a pattern similar to Wellesley's for providing gymnastics and sport facilities, such as a gymnasium and equipment, in order that all students could participate.

Other than the Brooklyn Normal School of Gymnastics, most private co-ed institutions, universities, and normal schools did not arrange special sport programs at the time of their founding. Neither did they use sport as a means of maintaining physical endurance in their students. Founded by Anderson in 1866, the Brooklyn Normal School of Gymnastics, however, taught both gymnastics and team sports from the beginning. The students engaged in popular recreational sports such as croquet and bicycling for enjoyment. Stanford University's founder built two gymnasiums, one for women and one for men. There was to be no discrimination between the sexes.

After many years of controversy about whether women should engage in sport and education, women became full-fledged students at the University of Wisconsin. Although a gymnasium was established, it was not used for exercise.

When the Woman's College at Greensboro, North Carolina, opened in 1892, it followed the pattern set by other women's colleges. A lady physician instructed students concerning hygiene, bathing, and other personal matters. To promote student health and strength,
teachers taught calisthenics, but sports were neither provided nor encouraged.

Vassar College, Mills, Arnold, West Chester and Wellesley taught sport during this period. Mills and Vassar taught horseback riding in 1864 and 1866 , respectively. Mills reported archery instruction. Arnold, a professional normal school, offered fencing, swimming, rowing, games and athletics. Wellesley taught crew and bicycling and by 1890 West Chester listed instruction in walking and bowling. ${ }^{3}$

The financial resources and philosophy of the founders, as well as the geographical location of the schools, undoubtedly affected the selection of the sports offered. Vassar College began horseback riding, and Wellesley began tennis, both elite sports. Tennis was eventually played at all schools. Vassar College and Wellesley both on New England lakes, encouraged rowing and ice skating. Just how sport moved from school to school is not known; however, by the end of 1890 , 14 sports were being offered at various institutions. Although intercollegiate sports did not exist, it was this period which laid the foundation for the sports programs of the future.

The period from 1891 to 1919 was characterized by a frenzy of sport activity, resulting in the addition of sports to the physical education curriculum. In general, more gymnasiums and athletic facilities were built, more faculty appointed, sports programs increased in size and scope, and students were active in sports.

With the increase of participation in sports, one sees the team games being invented and imported. The invention of basketball, and then volleyball, plus the importance of English field hockey, made a great impact on sport programs for women. Sanda Berenson, who had
the geographical advantage of being close to Springfield and the beginnings of basketball, introduced the game to Smith in 1892. Basketball could be played both outdoors and indoors, but with the large rooms provided for gymnasiums, basketball was the game to sports people. It caught on immediately and spread across the United States. By 1896 the University of Oregon women played basketball with Berkeley. ${ }^{4}$ "The first intercollegiate contest was shared by the University of California, Berkeley vs. Ellensburg Normal School with both sets of competitors having an intercollegiate basketball contest in $1895 .{ }^{4}$ The idea of teams of women playing against other teams of women must have startled many people in the nineties.

As in any innovation, the problem of regulating team sports concerned Ballintine at Vassar.

In 1901, she reported that she had persuaded the students, somewhat against their wills, to form house teams rather than class teams in hockey, so as to prevent too intense feeling and excitement. After the students complained about the officiating and roughness, basketball has had to be regulated by the department. Ballintine insisted that ${ }_{6}$ the only way to control the game was to supervise it. ${ }^{6}$

Interclass games were the fashion at this time, and to be selected on the first team or varsity team was an honor. Women practiced many hours while also engaging in their regular gymnastic training. Schools in Oregon held swimming and tennis competition for women. Basketball tournaments were started in the Midwest. Field Hockey and basketball were preeminent in the East. There were field days, rally days, class days, and sports days. During the pre-war years, individual and team merit was recognized with sweaters, letters, and trophies. ${ }^{7}$

The physical directors on the college campus provided leadership. Different philosophies about sports were beginning to crystallize:
-. . at the Boston Normal School, later the Department of Hygiene at Wellesley College, individual awards were all but eliminated and the philosophy of play for play's sake was supported. Women trained at Sargent School, on the other hand, continued to support programs more competitive in nature. 8

The results of this progressive era can be measured in the passage of women's suffrage and of prohibition after the spirit of the era faded. Woman's role had not changed essentially in the public eye, but she was allowed additional freedom. Between $1920-29$ was a time when women were awakening to the world. They became involved in reading, radio and new professions which previously had been considered taboo. Along with these expanding interests, women increasingly were eager to engage in sports. The philosophy of sports education gained impetus from both educators and the public.

By 1930 women were participating in a great variety of sports. A few of the important organizations which were developed:
(1) In 1917, the president appointed a committee to set rules of play and standards for women's sports;
(2) the Women's Division of the National Amateur Athletic Foundation, in 1923, and the United States Field Hockey Association, in 1922, were formed.

Despite all this support, the image of the sportsminded girl was becoming slightly tarnished. Displays of emotionalism and unladylike conduct (usually in basketball) resulting from poor leadership took place in the view of the American public. But because of the interest and economy many facilities were erected for play throughout the nation, and sports became big business. 9

From 1930-42 one saw the depression engulfing the country with despair, and women had to go to work since the men were away fighting the war. With negative attitudes toward intercollegiate competition, one sees play days coming into popularity. At a play day, women from several colleges were mixed together on color teams to play a variety of sports or recreational activities. The first play days were in the 1920's. Alice Sefton states: "Women should play sports for the joy of participation, letting beauty be the by-product." ${ }^{10}$ Professional leaders continued trying to improve the public's concept of the sportswoman.

Sports day were moving into view, in which competition was between women on teams representing their own institutions. Most schools brought pickup teams, and sometimes the players did not know beforehand in which event they would participate. Even though winners were not announced, games were modified, rules were changed and officials were rated by DGWS Rating Board. The sports day was a big improvement over the play days because it was organized in sports form, and each school had a regular team to work and practice with before competition. DGWS later required a minimum number of practice sessions before a team could compete, therefore, the caliber of play improved.

Having little money to spend during the depression the public turned to sports. Professional leadership organizations developed: a national section on Women's Athletics of the AAHPER and the Women's Division of the NAAF endeavored to bring women's sports under proper leadership.

In 1944-1965 one sees the effects of World War II. Many went to work in industry and some joined the armed services. At the same time the woman was recognized by her active participation in a variety of sports. Following the war, emphasis was on the individual and dual sports of bowling, skiing, golf, and tennis. Women took advantage of enlarged extramural programs; however, some colleges offered these programs for women and some did not.

The era of 1965-1975 could be classified as one of progressive growth. One saw athletics for women at all colleges and universities, with an increase both in participation and in the number of sports offered. With AIAW allowing the awarding of scholarships, one sees the move toward larger sports programs and higher quality of competition was evidenced. There has been much controversy during the last few years concerning Title IX, NCAA, scholarships, philosophy of athletics, and other issues arising from women's athletics.

Thus, the concept held by physical educators concerning appropriate competition for women has changed over the years. The leaders of the earliest era opposed women's athletics; however, interclass play, play days, sports days, intramural programs, extramural programs evolved, and finally, intercollegiate competition has become common. Gerber states:

The current period of women's athletics is one
in which a new appreciation for the values of inter-
collegiate sport at the highest level of skill is
demonstrated at official level. The old purposes
remain but are complemented by new goals which recognize the need of college women for oppor-1 tunities to engage in high level competition. ${ }^{11}$

Margaret Coffey thinks:

- . . the program of civilization in the twentieth century has drastically altered the image of the sportswoman. Fifty or sixty years ago, she was a rare creature, encumbered by rigid social mores as well as by yards of gabardine. Today, she ventures into virtually every area of physical endeavor, performing with grace and skill. Benefiting from the past six decades of both economic and social growth, her opportunities are unlimited. ${ }^{12}$

Over the years collegiate sport for women has been influenced and regulated by a number of organizations. The important ones affiliated with sport for college women include: The first Women's Athletic Association, organized in 1891 and present in 80 per cent of the large colleges at this time; ${ }^{13}$ the Athletic Conference of American College Women, organized in 1917, finally to become College Women in Sport; the National Association of Girls and Women Sports, better known as NAGWS, which provide the standards and rules for each sport and conducts coaching and officiating clinics.

The substantial growth of women's intercollegiate athletics in the late 1960's was triggered in large measure by the Study Conference on Competition held in 1965. The Association for Intercollegiate Athletics for Women (AIAW) was organized in 1971-72 to replace CIAW. It provided a governing body and leadership for initiating and maintaining standards of excellence in women's intercollegiate athletic programs. In 1973, AIAW sponsored the first National Invitational Junior/Community College Basketball Championship. In 1973, the first AIAW National Junior/ Community College Championships were conducted in volleyball, basketball, and golf. This makes 10 AIAW national championships held annually in seven different sports. By examining the organization that helped the Women's Intercollegiate Sports Program, one realizes that it was an
important factor one way or another in the development of women's athletics. ${ }^{14}$ In looking at the structure and responsibility of AIAW, one observes the tremendous task involved with the present status of Women's Intercollegiate Athletics. ${ }^{15}$ (Appendix B)

When President Ford signed the bill to approve Title IX in 1975, it was a break-through for women in sport. For the first time in intercollegiate athletics, women will have equal chances at budget allocations, facilities, uniforms, travel, and coaching, and in the number of scholarships. Now a new and valuable experience can be added to the total education of women throughout the country. As a result of HEW's guidelines, there is a growth expected in professional women's athletics and in high school athletic programs for women. 16

The future of intercollegiate women's sports looks promising. The enthusiasm on the part of women participants and the professional teacher-coaches is high. By working toward some equalization of opportunity, we may indeed begin to achieve a more wholesome, democratic balance in all phases of our life. ${ }^{17}$

Sport and Society

The research concerning Women's Intercollegiate Sports at the present seems to be limited when dealing with geography of sport for women. Dr. John Rooney has done extensive geographic research concerning men's athletics.

Moseley and Whitley did a study based on responses from 86 universities located in 45 states (1972). They found basketball, tennis, volleyball, field hockey, and softball to be the most popular sports. Dr. Rooney stated from this study that:

Their results indicated a pronounced geographical variation in the games played. Tennis-a major sport in all but the western regions. The Northeast favors a field hockey-tennis combination, the Midwest basketball-tennis, and the South embraces volleyball and tennis. In the West, Volleyball, softball, and gymnastics are the leading activities. 18

Duncan, in 1929, reported that in 1909 the West and Midwest had the greatest number of varsity programs, from 1923-72 the greatest percentage of varsity teams was in the East. He reported that in 1923 the sports of basketball, tennis, field hockey and swimming were the most popular sports in colleges across the United States: in 1930 - tennis, basketball, field hockey, swimming; in 1951 - basketball, field hockey, tennis, softball; in 1972 - basketball, tennis, volleyball, field hockey and gymnastics. 19

A survey study of all the colleges and universities belonging to AIAW was conducted by Mark Okrant in 1975. He found that only 32 institutions offered scholarships during the $1974-75$ academic year. 20 AIAW reported that 60 schools offered scholarships during the 1974-75 academic year. ${ }^{21}$ With the increase of scholarships across the United States it is hard to obtain an accurate account. It appears that with over 400 AIAW member schools that scholarships are still in the minority at colleges and universities.

A study done by Murphy and Vincent in 1973 obtained an 82 per cent response of AIAW institutions. From the 213 responses used for the study on the budget it was revealed that regions $1 A-$ Northeast, $1 B-$ Mid-Atlantic, 3-Southeast, 7-Intermountain, and 9-Northwest ranked in the upper groups of regions with larger average budgets per school and per student and larger average budgets per sport. Regions 2-Southern, 4-Southwest, 5-Midwest, 6-"Region 6." and 8-Western composed the lower
regions with generally lower budgets in all aspects. In considering schools of various sizes, the largest average budgets per school were received by the largest insitutions, with the most consistent patterns being that colleges and universities with total enrollments of from 15,000-19,000 received comparably larger budgets per school, and offer a larger number of sports per school and have larger budgets per school. A large percentage of schools of this size allowed teaching load credit for coaching and also allow a greater percentage of teaching load credit for coaching responsibilities. There was also a trend for the smaller schools to receive the larger average budget per student; however, their total budgets per school are much smaller.

According to Murphy and Vincent findings, institutions who received their funds from the category "Other" had the largest average budgets, and the schools who received funds from the Women's Physical Education Department report the lowest funds. Forty-one per cent of the schools, regardless of size or region, received their budgets from Student Activity Funds, 25 per cent from School Budgets, 13 per cent for "Other"! sources, 11 per cent from a "Combination" source and three per cent from the Women's Physical Education Department Budget.

Murphy and Vincent indicated the schools who received their funds from the School Budget agreed that this was the best source from which to receive funds. The source of funds considered most unsatisfactory was the monies received from the Student Activity Funds. Among all institutions, regardless of their present source of funds; the most frequently mentioned "Best" source was a line allocation from the total school budget, followed by a constant budget from student activity funds, allocations from a women's athletic department budget, and a state line
allocation. By far the most frequently anticipated change was an increase in athletic funds with a greater proportion of the total athletic budget provided for athletic programs for women.

The optimal budget needed, or that budget considered adequate to administer an intercollegiate program for women broad enough to meet their needs, was an average of $\$ 21,600$ as compared to the present average budget of $\$ 8,900$, according to the study conducted by Murphy and Vincent. Thus, the average budget was considered to be approximately 40 per cent of that needed to offer an adequate program for women. Many of the respondents'comments as to offering a more adequate program would include offering more sports, more teams in each sport, and better financing of the present program as well as for future expansion. Since the average budget per sport was on $1 y \$ 1,600$, the projected budget, even if no other sports were offered, would allow an average budget per sport of only $\$ 3,600$. Constancy of budget, with expansion needs considered, was the plan of most institutions.

Murphy and Vincent reported that the leadership for the intercollegiate athletic programs for women was furnished in approximately 95 per cent of the institutions by the women of the physical education faculty. In a majority of cases, the only remuneration for coaching received by these women faculty coaches was through released time, or teaching load credit for coaching. For all schools, without regard to region, size, or source of funds, 71 per cent of the schools reported receiving teaching load credit for coaching, with the overall average teaching load credit received for coaching one sport was 24 per cent.

Murphy and Vincent's study has shown various aspects of Womens Intercollegiate Sports concerning variables such as: the average
number of sports per school, contests per school, season length, hours of participation, state, regional, and national participation, scholarships, state representation, highest participation, contest participation, and budget. Throughout this study one sees an increasing trend in Women's Intercollegiate Sports. 22

A study was conducted by Greg Mohns (1975) concerning Women's Intercollegiate Athletics at the universities that comprise the Big 8 conference for men. Seven of the eight conference schools responded to the survey (Kansas University non-reporting member). The reporting schools were: Oklahoma State University, Kansas State University, Nebraska University, Colorado University, Missouri University, Oklahoma University, and Iowa State University.

All of these institutions were operating an organized program for Women's Intercollegiate Sports. In relation to jurisdiction, three schools had their women's program under the direction of a head of a combined physical education and athletic department, one program was the responsibility of the Director of Men's Athletics, one program was governed by the Women's Athletic Program, one was under the guidance of the University's Recreation Department, and the other reporting school listed "other (without explanation) as the method of jurisdiction.

Mohns' study indicated five schools did not offer scholarships for women in athletics; however, Colorado and Missouri offered scholarships in 1974-75 which consisted of tuition and fees.

According to Mohns, the varsity sports offered in women's intercollegiate athletics were: badminton, basketball, field hockey, golf, fencing, volleyball, and synochronized swimming. Each sport and school
showed an increase in games or events played from 1973-74 to 1974-75. The average season length ranged from two months to all year, depending on the sport. The length of practice per week averages from five hours to 15 hours. ${ }^{23}$

Another study concerning the Big 8 schools was done at the University of Oklahoma by Cathie Sweitzer (1975). The results showed that the average number of scheduled contests for each particular sport team ranged from six in badminton to 18 in basketball. Track had an average of 16 ; volleyball, 15 ; softball, 13 ; tennis and field hockey, each averaged 12; gymnastics and swimming averaged 10 apiece; and golf scored with eight.

Total budgets (salaries included) ranged from a low of $\$ 39,500$ to a high of $\$ 123,000$. After salaries were taken out, the monies left for actual program operation ranged from a low of $\$ 16,000$ to a high of \$81,840. The larger budgets suggested that the greater the budget of the university, the larger the program, and the more contests the university would be able to support. ${ }^{24}$

A recent survey of the Big 8 institutions was completed by Jean Cerra at the University of Missouri (1977) showing the increase of monies allotted from 1975-77. In 1975, 1976, and 1977 the Big 8 schools reported the following total budgets for women's athletics.

| Name of School | No. of <br> Sports Offered | Budget <br> $1975-76$ | Budget <br> $1976-77$ |
| :--- | :---: | :---: | :---: |
| Colorado State University | 6 | $\$ 98,000$ | $\$ 117,000$ |
| Iowa State University | 8 | 54,000 | 126,000 |
| Kansas State University | 4 | 128,000 | 181,000 |
| University of Kansas | 9 | 145,000 | 190,000 |


| Name of School | No. of <br> Sports Offered | Budget <br> 1975-76 | Budget $1976-77$ |
| :---: | :---: | :---: | :---: |
| University of Nebraska | 9 | \$177,000 | \$215,000 |
| University of Oklahoma | 8 | 112,000 | 140,103 |
| Oklahoma State University | 9 | 77,000 | 117,000 |
| University of Missouri | 8 | 81,840 | 161,757 |
| Cerra reported that Big 8 schools offered scholarships from a |  |  |  |
| partial amount to a full ride for students out of state. Coaches! |  |  |  |
| salaries ranged from a low of \$2,750 to a high of \$18,100. The project |  |  |  |
| budgets for 1977-78 are even higher, with many schools doubling previou |  |  |  |
| monies allotted. The Big 8 schools are not representative of the total |  |  |  |
| picture of all the AIAW member schools as they may have less and many |  |  |  |
| have much more. |  |  |  |
| The colleges and universities around the nation that have the most |  |  |  |
| money are dominating women's athletics due to better facilities, pro- | hletics due to money, and qual | facil <br> d coache | es, pro- |

## FOOTNOTES

${ }^{1}$ Betty Spears, "The Emergence of Women in Sports," Women's
Athletics: Coping with Controversy (Washington, D.C., 1974), pp. 2628.
${ }^{2}$ Ibid., p. 29.
$3^{3}$ Ibid., pp. 29-30.
${ }^{4}$ Ibid., pp. 30-34.
${ }^{5}$ Ellen Gerber, The American Woman in Sport. (Massachusetts, 1974) pp. 62-65.
${ }^{6}$ Spears, pp. 36-39.
7Margaret A. Coffey, "Then and Now" "The Sportswomen," JOHPER, Vol. XXXVI, No. 11 (February, 1965), p. 38. At the time of publication, Margaret Coffey was an Associate Professor of Physical Education at the University of Massachusetts.

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\begin{aligned}
& 8_{\text {Ibid., p. }} 39 . \\
& 9_{\text {Ibid., p. }} 40 . \\
& 10_{\text {Ibid., p. }} 41 .
\end{aligned}
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${ }^{11}{ }_{\text {Woman }}$ and Sport, Proceedings from the National Research Conference on Women and Sport, Dorothy V. Harris, ed. (State College, Pa., 1973).
${ }^{12}$ Coffey, pp. 38-41.
${ }^{13}{ }_{\text {Gerber }}$, p. 77 .
${ }^{14}$ Ibid., pp. 78-85.
${ }^{15}$ AAHPER, AIAW Handbook of Policies and Operating Procedures -1976-77 (Washington, D.C., 1976), pp. 1-30.
${ }^{16}$ Ray Franks, "Meet the New President," The 1974-75 Directory of Women's Athletics (Amarillo), pp. 4-6.
${ }^{17}$ Margaret Dunkle, "Title IX - Puts Women in the Running," JOHPER, Vol. XXX, No. 18 (January, 1975)

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John Rooney, Geography of American Sport (Reading, Mass., 1974), p. 249.
${ }^{19}$ Gerber, pp. 66-68.
${ }^{20}$ Mark J. Okrant, "An Examination of the Educational and Regional Factors in Explaining Women's Intercollegiate Athletic Program Quality." (Unpub. dissertation, Oklahoma State University, 1975.)
${ }^{21}$ Judith R. Holland (ed.), AIAW Handbook of Policies and Operating Procedures - 1974-1975 (Washington, D.C., 1974), p. 52.
$22_{\text {Elizabeth Murphy and Marilyn Vincent. "Status of Funding of }}$ Women's Intercollegiate Athletics," JOHPER (October, 1973), pp. 11-15.
${ }^{23}$ Greg Mohns, "Women's Intercollegiate Athletics at the Big 8 Schools (Stillwater, Oklahoma, 1974), M. S. thesis.
${ }^{24}$ Cathie Schweitzer, "Research on Big 8 Schools" (Norman, Oklahoma, 1973), M. S. thesis.
${ }^{25}$ Jean Cerra, "Survey on Big 8 Schools," (Columbia, Missouri, 1977), Unpublished article.

## CHAPTER IV

## ANALYSIS OF DATA AND DISCUSSION OF RESULTS

As stated in Chapter II the purpose of this study was to analyze data concerning Women's Intercollegiate Sports, collected from 198 colleges and universities. A letter explaining the study, along with a questionnaire was mailed to the Chairman of the Women's Intercollegiate Program of each of the 349 members of the AIAW. A copy of the letter and questionnaire are enclosed in Appendix B. Of the 349 colleges and universities contacted, 198 responded in time to be included in the study, yielding a return of 57 per cent for the study.

Totals, averages, and percentages may differ slightly from category to category due to the rounding of figures, and due to the fact that of the 198 schools responding 15 schools failed to respond to one or more of the items and were not used for each question.

The questionnaire included 12 questions. Seven of the 12 were used in the study. The other five were not used due to insufficient data.

In explaining the data, the researcher will be referring to the nine regions of $A I A W$, which include the following (Figure l):

Region I (Northeast)
IA Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont

IB Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania

INTERCOLLEGIATE WOMEN'S ATHLETICS
LOCATION REGIONAL DIVISIONS


Region 2 (Mid-South)

Kentucky, North Carolina, South Carolina, Tennessee, Virginia

Region 3 (Southeast)
Alabama, Florida, Georgia, Mississippi
Region 4 (Southweat)
Arkansas, Louisiana, Oklahoma, Texas
Region 5 (Midwest)

Illinois, Indiana, Michigan, Ohio, West Virginia, Wisconsin

Region 6 (Midwest and Plains)

Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

Region 7 (Rocky Mountain)

Arizona, Colorado, New Mexico, Utah, Wyoming
Region 8 (Far West)
California, Hawaii, Nevada
Region 9 (Pacific Northwest)

Alaska, Idaho, Montana, Oregon, Washington
The 198 colleges and universities are located by cities to show the precise location of the study (Figure 1). One can see from the map that the eastern part of the United States had more input than the other areas. There also tends to be more interest and progression in women's sports on the eastern coastal states. In looking at the map the central part of the United States seemed to be the weakest in input; this was due to the less densely populated areas and women's intercollegiate sports seemed to be the weakest in the central areas. Looking to the Far West, California was leading with respondents and
and also was a national leader in women's athletics. Some states responded better than others, so in turn, we have a better view of their programs. But, since the data was viewed on an average, ratio, or region, the study is representative of the entire United States.

## Analysis of Data

## Participation Patterns

The pattern of participation in American sport has been shaped primarily over the last few years and is characterized by extreme spatial variation.

The results of the Sports Participation Survey are presented in Table $I$ and Table II. The largest number of sports offered in any state was 15 , five of which were team sports by nature and lo were individual sports. The states reporting 15 were Virginia, Texas, and California, with nine indoor and six outdoor sports and Pennsylvania had eight indoor and seven outdoor sports. There were 22 different women's intercollegiate sports offered in the United States; seven were team sports and 15 were individual sports.

Certain areas of the country offered nearly unlimited opportunity for students to participate in a wide variety of sports. Other densely populated areas offered limited participation opportunities which enables only the highly skilled to participate.

TABLE I

NUMBER OF SPORTS OFFERED IN AIAW SPORTS COMPETITION TEAM OR INDIVIDUAL

| Number of Sports | Team or Individual |
| :--- | :--- |
| 1. Basketball | Team |
| 2. Volleyball | Team |
| 3. Tennis | Individual |
| 4. Swimming | Individual |
| 5. Badminton | Individual |
| 6. Softball | Team |
| 7. Gymnastics | Individual |
| 8. Fencing | Individual |
| 9. Field Hockey | Team |
| 10. Golf | Individual |
| 11. Track and Field | Individual |
| 12. Archery | Individual |
| 13. Water Polo | Team |
| 14. Bowling | Individual |
| 15. Diving | Individual |
| 16. Riflery | Individual |
| 17. Rodeos | Individual |
| 18. Lacrosse | Team |
| 19. Skiing | Individual |
| 20. Dance | Team |
| 21. Crew | Squash |

## TABLE II

NUMBER OF SPORTS OFFERED IN EACH STATE

| Number of Sports per State | 71-72 | States $72-73$ | 73-74 |
| :---: | :---: | :---: | :---: |
| 15 |  | Texas <br> Virginia | Pennsylvania <br> Texas <br> California <br> Virginia |
| 14 | Colorado California Texas Wisconsin | Pennsylvania <br> Wisconsin <br> Utah <br> Illinois <br> California | Wisconsin Utah Illinois Ohio Colorado |
| 13 | Missouri <br> Maine <br> Pennsylvania Illinois Ohie | Colorado Ohio Missouri | Washington, West Virginia Missouri |
| 12 | Idaho Oregon New Mexico | Maine <br> New York <br> Washington | Rhode Island <br> New York <br> Oregon |
| 11 | New York Washington Oklahoma Minnesota | Oklahoma <br> Minnesota <br> Oregon <br> Massachusetts <br> West Virginia | Maine <br> Michigan <br> Massachusetts <br> Oklahoma <br> Minnesota |
| 10 | Indiana | Maryland <br> Idaho <br> Indiana | Maryland New Mexico Florida Indiana Idaho |
| 9 | Maryland <br> Iowa <br> West Virginia <br> Utah | Rhode Island <br> Arizona <br> Tennessee <br> Iowa | Tennessee <br> Iowa <br> South Carolina <br> Arizona |

TABLE II (Continued)

| Number of <br> Sports oer State | 71-72 | States $72-73$ | 73-74 |
| :---: | :---: | :---: | :---: |
| 8 | Massachusetts | Michigan <br> New Hampshire <br> Carolina <br> Georgia <br> Connecticut <br> North Carolina <br> North Dakota | New Hampshire Georgia <br> North Dakota <br> North Carolina Connecticu |
| 7 | Tennessee <br> Georgia <br> North Carolina <br> South Carolina <br> Michigan <br> North Dakota <br> Arizona | Kentucky Mississippi | Alabama <br> Kentucky <br> Mississippi <br> Wyoming |
| 6 | Kentucky | Alabama | New Jersey <br> South Dakota |
| 5 | Kansas <br> South Dakota <br> Wyoming <br> Florida <br> Mississippi | Delaware <br> Kansas <br> South Dakota Wyoming | Delaware <br> Arkansas <br> Kansas <br> Hawaii |
| 4 | Nebraska <br> Nevada <br> Alabama | New Jersey <br> Nevada <br> Arkansas <br> Nebraska | Nevada <br> Nebraska |
| 3 | Delaware Arkansas |  | District of Columbia |
| 2 | District of Columbia <br> Louisiana <br> New Jersey | District of Columbia Louisiana | Louisiana |

## Number of Sports per State

The number of sports that are offered by a state depended on certain environmental limitations, such as availability of snow and ice, as well as tradition and economic well-being. As stated above, the participation survey indicated a total of 22 sports offered. The coastal states, Texas, Virginia, Pennsylvania, and California were participating in 15 sports. The states with 13 to 15 sports were almost all characterized by high population density. The fewest number of sports offered by any state was two (Table II).

Regions 1A-(Northeast), 4-(Southwest), 5-(Midwest), 6-(Midwest and Plaina), and 9-(Pacific Northwest) rank in the upper group of regions with larger numbers of sports offered in 1971-72. Regions 1B-(Northeast), 2-(Mid South), 3-(Southeast), 7-(Rocky Mountain), and 9-(Pacific North west) composed the lower group with generally fewer sports offered in 1971-72. In 1972-73 the regions 1A-(Northeast), 4-(Southwest), 5-(Midwest), 7-(Rocky Mountain), 8-(Far West), and 9-(Pacific Northwest) ranked in the upper group of regions with larger numbers of sports offered. Regions 1B-(Northeast), 2-(Mid South), 3-(Southeast), 8-(Far West), and 9-(Pacific Northwest) with generally fewer sports offered in 1972-73. In 1973-74 Regions 1A-(Northeast), 5-(Midwest), 7-(Rocky Mountain), 8-(Far West), and 9-(Pacific Northwest) were in the upper group of regions, and Regions 1B-(Northeast), 2-)Mid South), 3-(Southeast), 4-(Southwest), and 6-(Midwest and Plains) in the lower group. The mean of all AIAW regions in 1971-72 was 4.22 in 1972-73, 5.23 and 1973-74, a 5.82. Comparison of the data shows great similarity among the Regions in the upper division for the years of $1971-72$ and 1973-74 (Table III).

TABLE III

SPORTS PER REGION

| Region | 1971 | 1972 | 1973 |
| :---: | :--- | :--- | :--- |
| 1 A | 4.6 | 5.9 | 6.9 |
| 1B | 4.2 | 4.5 | 4.8 |
| 2 | 3.4 | 3.9 | 4.2 |
| 3 | 2.6 | 3.9 | 4.0 |
| 4 | 4.3 | 5.3 | 5.6 |
| 5 | 4.8 | 5.4 | 6.0 |
| 6 | 4.5 | 4.7 | 4.8 |
| 7 | 3.3 | 7.0 | 9.0 |
| 8 | 4.2 | 5.3 | 6.3 |
| Average | 6.3 | 5.2 | 6.6 |

The data shows an increase each year in the number of sports partipated in by AIAW members. Other studies done on sports per school (Murphy, Vincent and Mohns (1973), using a larger sample, also showed an average of six sports offered and an increased demand of women involved in athletics, interest in individual sports, and the Women's Intercollegiate Athletic boom in general. Looking at the trend involved in women's sports one wonders whether the program will continue to add sports or become more specialized and offer fewer sports on a larger scale. Looking to the future, it would seem that colleges and universities would tend to specialize if they wanted to be national winners, unless the institutions have the money to support all of the sports in such a manner.

Number of States per Sport

Another indicator of participation or popularity of certain sports was the percentage of states that participated in the different sports. Basketball was in the top five in all fifty states except Florida and ranked first in well over half of the United States (Figure 2). Basketball for women has always had its place in the sports world from the old six player, one dribble era to the five player men's game of today. It is a sport that in many states, such as Iowa, that takes priority over men's basketball. Most women players in Iowa start playing basketball in elementary school due to the prestige of the sport. Since it is an indoor sport it can easily be played anywhere in the United States, and it requires little money and equipment. Since women started with very little support or money from the schools or public, basketball was a sport that could use the men's facilities

## INTERCOLLEGIATE WOMEN'S ATHLETICS

PARTICIPATION*


* SPORTS RANKED ACCORDING TO PARTICIPATION
and equipment, and allowed many women to participate at one time. There has always been interest in women's basketball with the opportunities to participate after college, such as on AAU teams, PanAmerican Team, and Pro-Teams. Women's Olympic basketball began in 1976 and should generate an even greater interest in the game.

Volleyball, played in 44 states, ranks right behind basketball in a third of the states. The states that do not have volleyball as one of the top five sports are Arizona, Colorado, New York, Missouri, New Hampshire, New Jersey, and District of Columbia. These states represented the east and central areas of the United States. Where the weather is warm, such as in the south, the game is played outdoors as well as indoors.

Field Hockey was played in almost every eastern state and in the northwestern areas. One sees little field hockey in the south or the central part of the United States. This is due to the fact that field hockey is generally played in a cool climate, and it originated in the east. Its slow diffusion may in part be related to the rough nature of the game.

Softball was available in 33 per cent of the states with the most emphasis in the central area of the United States. Teams were also in New York, Ohio, Indiana, Illinois, and South Carolina. One can assume that if one state has a sport that the surrounding area states are also likely to start participation. This normal diffusion process facilitates competition between neighboring states. For example, New York will play Ohio; Indiana will play Illinois.

Climate and topographic conditions were quite evident in regard to skiing. All states that had skiing as a competitive sport were
mountainous and are located in the northern part of the country. There were seven high-participation sports that occur in some states. These could be classified as lifetime sports. The term life time sports means several things; basically, it refers to sports that are individual or dual in nature and do not need team organization for participation. They are the type of sport that can also be participated in and enjoyed by people throughout their life.

Tennis was available in over half of the states and was the number one sport in New 'Mexico, Louisiana, and Minnesota. The sport seemed to be wide-spread across the United States, but there was more participation in the warmer climates.

The following individual sports were found in relatively few states as compared to the other sports previously mentioned. Archery was a competitive sport in only the state of Arizona. Badminton was found in six states: Maine, Tennessee, Minnesota, Texas, Arizona and California. Track and Field was identified in 12 states: Washington, New Mexico, Texas, Wyoming, North Dakota, Kansas, Oklahoma, Minnesota, Missouri, Wisconsin, Tennessee, and Georgia (Figure 3).

The majority of the sports ranked in the top five by participation were team sports. But, taking a look beyond the top five sports, the researcher realized that the individual sports played a major role in the women's athletic programs. Indoor and outdoor sports were about equal with a slight tendency toward more involvement in the indoor sports. But, it may be noted, that the climate within the states played a major role in whether sports were participated in indoor or outdoor. In warmer climates sports will be played outside the year round, wuch as swimming, tennis and golf. In the colder climates one sees sports

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inside or sports that take place outside such as skiing and other
winter sports.
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## Contests per Sport by State

Examining the number of contests played in each sport, one saw how much emphasis was placed on a sport (Table IV). The investigator noted from Table IV that from 1971-72 to 1973-74 there was an increase of money for women and the general growth of women's athletics. For example, the most contests played in basketball during 1971-72 were 16 in Tennessee, with a national average of approximately 10 contests. In 1973-74 the high was 17 in Washington with the average of nearly 13, a 30 per cent increase!

Table IV showed a growth in sports contests throughout the United States. One would conclude that most states are expanding their programs; but one should use caution to be careful in comparing sports. For example, in basketball a 25 -game schedule would constitute a good program; whereas, track and field would need less than half as many meets to attain similar quality. One can conclude, however, that women's sports are increasing, with longer seasons and more contests per sport.

TABLE IV
NUMBER OF CONTESTS PLAYED PER STATE (MEAN)

| Sport | Year $71-72$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ | Sport | Year $71-72$ | Year $72-73$ | Year $73-74$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama (3) | Arkansas (2) |  |  |  |  |  |  |
| Badminton | . 66 | . 66 | 1.66 | Basketball | 6 | 13 | 13.5 |
| Basketball | - | 7.33 | 10 | Gynmastics | - | - | 2.5 |
| Golf | . 66 | 1.33 | 1.33 | Competitive Swim | - | 3 | 3 |
| Gymnastics | - | 3 | 1.33 | Tennis | 3 | 7 | 7 |
| Softball | - | 2 | - | Volleyball | 5.5 | 18.5 | 16.5 |
| Synchronized Swim | - | - | 1 | California (15) |  |  |  |
| Tennis | 3.3 | 4 | 5.33 |  |  |  |  |
| Track and Field | - | . 66 | - | Archery | . 6 | 1.13 | 1.6 |
| Volleyball | 9.66 | 17.66 | 19.33 | Badminton | 2.53 | 3.26 | 4.2 |
|  |  |  |  | Basketball | 8.93 | 12.06 | 13.13 |
| Arizona (2) |  |  |  | Fencing | 2.46 | 3.93 | 4.53 |
|  |  |  |  | Field Hockey | 2.26 | 1.86 | 2.66 |
| Archery | 7.5 | 13 | 13 | Golf | 2.13 | 3.06 | 4 |
| Badminton | 3.5 | 7.5 | 8.5 | Gymnastics | 1.46 | 2.4 | 2.86 |
| Basketball | - | 6 | 14 | Competitive Swim | 2.26 | 4.06 | 5.46 |
| Field Hockey | - | 2 | 2 | Softball | 2.6 | 3.26 | 3.46 |
| Softball | - | 11 | 4 | Tennis | 9 | 10.86 | 13.16 |
| Competitive | 2.5 | 3 | 3 | Track and Field | . 6 | 1.13 | 2.4 |
| Swim |  |  |  | Volleyball | 8.8 | 11.5 | 13.46 |
| Tennis | 9 | 20 | 18 | Water Polo | - | - | . 33 |
| Volleyball | - | 7 | 19.5 | Diving | . 66 | . 8 | . 6 |
| - Gymnastics | 1.5 | 6.5 | 6.5 | Bowling | . 66 | . 66 | . 66 |

TABLE IV (Continued)

| Sport | Year $71-72$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ | Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Colorado (2) |  |  |  | Connecticut (Continued) |  |  |  |
| Badminton | 3 | - | - | Badminton | 4 | 4 | 4 |
| Basketball | 7.5 | 9.5 | 15 | Fencing | 3.5 | 3.5 | 3.5 |
| Bowling | 3 | - | - |  |  |  |  |
| Diving | 1 | 1 | . 5 | Delaware (1) |  |  |  |
| Fencing | 5 | 3 | 2 |  |  |  |  |
| Field Hockey | 11 | 9 | 6.5 | Basketball | 10 | 12 | 12 |
| Golf | 2 | - | - | Field Hockey | 8 | 10 | 10 |
| Gymnastics | 1 | 3.5 | 10 | Competitive Swim | 4 | 8 | 11 |
| LaCrosse | 7 | 7 | 7 | Tennis | - | 8 | 9 |
| Skiing | 10 | 10 | 10 | Volleyball | - | 8 | 14 |
| Softball | 11.5 | 12.5 | 14 |  |  |  |  |
| Competitive Swim | 5 | 3 | 3 | Florida (3) |  |  |  |
| Tennis | 11 | 12 | 10.5 |  |  |  |  |
| Volleyball | 9.5 | 10.5 | 8.5 | Basketball | - | 1.6 | 5 |
| Track and Field | - | - | 2 | Bowling | - | 1.7 | 1.3 |
|  |  |  |  | Diving | - | 3 | 4 |
| Connecticut (2) |  |  |  | Golf | 2 | 3.7 | 5.7 |
|  |  |  |  | Gymnastics | - | 1.3 | 2 |
| Basketball | 8.5 | 9 | 10 | Softball | - | 9.7 | 14.3 |
| Field Hockey | 8 | 8.5 | 9 | Competitive Swim | 1.3 | 3 | 4.3 |
| Golf | 1.5 | 1.5 | 1.5 | Tennis | 4 | 8 | 9.3 |
| Gymnastics | - | 2 | - 2 | Track and Field | . 3 | 2 | 4.3 |
| Tennis | 8 | 8 | 10 | Volleyball | - | 16.3 | 18.3 |
| Volleyball | 5 | 8 | 9 |  |  |  |  |

TABLE IV (Continued)

| Sport | Year $71-72$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ | Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | Year $72-73$ | Year $73-74$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Georgia (6) |  |  |  | Idaho (2) (Continued) |  |  |  |
| Basketball | 8.33 | 9.33 | 16.16 | Softball | 4 | 4.5 | 5 |
| Diving | - | - | 10 | Competitive Swim | - | - | 1.5 |
| Golf | 1.66 | 1.66 | 2 | Tennis | 2.5 | 6.5 | 2 |
| Gymnastics | 2.66 | 3 | 2.66 | Track and Field | 1 | - | - |
| Softball | 1.83 | 1.33 | 2.3 | Volleyball | 4 | 11.5 | 14.5 |
| Tennis | 5.83 | 7.83 | 9.5 |  |  |  |  |
| Track and Field | . 83 | 1.16 | 1.16 | Illinois (8) |  |  |  |
| Volleyball | 11.16 | 13.16 | 15.83 |  |  |  |  |
|  |  |  |  | Archery | . 75 | . 75 | . 75 |
| Hawaii (1) |  |  |  | Badminton | 1.37 | 1.25 | 1.25 |
|  |  |  |  | Basketball | 12.87 | 14.25 | 15.12 |
| Basketball | - | - | 8 | Diving | . 75 | . 75 | . 75 |
| Golf | - | - | 10 | Fencing | 2 | . 75 | . 87 |
| Competitive Swim | - | - | 10 | Field Hockey | 5.25 | 7.62 | 7 |
| Track and Field | - | - | 2 | Golf | 2.12 | 2.12 | 1.87 |
| Volleyball | - | - | 12 | Gymnastics | 2.75 | 3.12 | 2.25 |
|  |  |  |  | Softball | 7.25 | 8.37 | 7.87 |
| Idaho (2) |  |  |  | Competitive Swim | $3.12$ | 3.25 | 3.87 |
|  |  |  |  | Tennis | $3.5$ | $5.12$ | 5.62 |
| Archery | . 5 | - | - | Track and Field | 2.12 | 2.25 | 3 |
| Badminton | 1.5 | 1.5 | 1.5 | Volleyball | 8.75 | 14.25 | 11.87 |
| Basketball | 5 | $11$ | 11 | Cross Country | - | . 5 | . 75 |
| Fencing | 1 | 1 | - |  |  |  |  |
| Field Hockey | 4 | 11 | 6 |  |  |  |  |
| Gymnastics | 2.5 | 2.5 | 1.5 |  |  |  |  |
| Golf | 1.5 | 1.5 | - |  |  |  |  |

TABLE IV (Continued)

| Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ | Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indiana (3) |  |  |  | Kansas (2) |  |  |  |
| Badminton | 2 | 2 | 2.66 | Basketball | 12 | 13.5 | 14 |
| Basketball | 7.33 | 8.33 | 9 | Softball | 3.5 | 2.5 | 2.5 |
| Field Hockey | 6.33 | 6.66 | 7.33 | Tennis | 5.5 | 2.6 | 8 |
| Gymnastics | 2 | 2 | 2.66 | Track and Field | 1.5 | . 5 | 3.5 |
| Lacrosse | 2 | 2 | 2.66 | Volleyball | 9 | 11.5 | 14 |
| Softball | 4 | 4.66 | 5.33 |  |  |  |  |
| Competitive Swim | 2 | 2 | 2.66 | Kentucky (5) |  |  |  |
| Tennis | 2 | 2 | 3 |  |  |  |  |
| Track and Field | 2 | 2 | 2.66 | Basketball | 8.2 | 10.4 | 15 |
| Volleyball | 5.33 | 6.33 | 8 | Field Hockey | 4.4 | 4.8 | 5.2 |
|  |  |  |  | Golf | - | . 2 | . 4 |
| Iowa (5) |  |  |  | Gymnastics | 2.2 | 3 | 2.8 |
|  |  |  |  | Tennis | 5 | 5.6 | 8.2 |
| Basketball | 7.8 | 12.8 | 16 | Track and Field | . 8 | 1 | 1.2 |
| Golf | . 4 | . 8 | . 2 | Volleyball | 6.4 | $7 \cdot 4$ | 10.6 |
| Gymnastics | - | 3.8 | 5 |  |  |  |  |
| Field Hockey | 4.8 | 4.8 | 5 | Louisiana (1) |  |  |  |
| Softball | 6.2 | 9.2 | 7.6 |  |  |  |  |
| Competitive Swim | . 6 | 1 | 1 | Tennis | 4 | 10 | 15 |
| Tennis | 3.2 | 5.2 | 6.8 |  |  |  |  |
| Track and Field | 1.4 | 2.4 | 3.6 | Maine (3) |  |  |  |
| Volleyball | 7.2 | 12.2 | 14 |  |  |  |  |
|  |  |  |  | Archery | 2.7 | 1.3 | 1 |
|  |  |  |  | Badminton | 1.7 | 2.7 | - |
|  |  |  |  | Basketball | 8.3 | 9 | 12.3 |

## TABLE IV (Continued)

| Sport |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Year | Year | Year | Sport | Year | Year | Year |
|  | $71-72$ | $72-73$ | $73-74$ |  | $71-72$ | $72-73$ | $73-74$ |

Maine (3) (Continued)

| Bowling | 5 | 4 | 5.3 |
| :--- | :--- | :--- | :--- |
| Fencing | 1.3 | 2.3 | 2.3 |
| Field Hockey | 7.7 | 6 | 9.6 |
| Gymnastics | 3.3 | 4 | 5 |
| Skiing | 4.7 | 3.3 | 8 |
| Softball | - | .7 | - |
| Volleyball | 6.3 | 5.3 | 9.3 |
| Lacrosse | 1 | 1.7 | 2 |
| Tennis | 2 | 5.3 | 5.3 |
| Competitive Swim | 1 | - | - |

Maryland (3)

| Basketball | 9.3 | 9.7 | 10.3 |
| :--- | :--- | :--- | ---: |
| Field Hockey | 8.7 | 9.3 | 9.7 |
| Fencing | 2 | 2 | 1.3 |
| Gymnastics | 2.7 | 2.7 | 5 |
| Lacrosse | 8.3 | 7.7 | 9.3 |
| Softball | 2.7 | 3.3 | 3.7 |
| Competitive Swim | 6 | 7.3 | 6.3 |
| Tennis | 9.6 | 9.7 | 10.3 |
| Track and Field | - | .6 | 1.7 |
| Volleyball | 6.7 | 6.7 | 8 |

Massachusetts (2)

| Basketball | 6 | 12.5 | 12.5 |
| :--- | :--- | :---: | :---: |
| Diving | - | 3 | 4.5 |
| Field Hockey | 4.5 | 10.5 | 10.5 |
| Fencing | - | 1.5 | 4 |
| Gymnastics | 4 | 7 | 8 |
| Skiing | 4 | 4 | 4 |
| Tennis | 7 | 11 | 8.5 |
| Volleyball | - | 5 | 8.5 |
| Lacrosse | - | 4.5 | 4 |
| Softball | 4 | 9 | 9 |
| Competitive Swim | 4 | 7 | 8.5 |

Michigan (3)

| Basketball | 3.3 | 3 | 9.3 |
| :--- | :---: | :---: | :---: |
| Bawling | .7 | 3 | 3 |
| Field Hockey | 2.7 | 2.7 | 9 |
| Gymnastics | .3 | .3 | 1.3 |
| Competitive Swim | 3 | 1.7 | 4.7 |
| Tennis | 1.3 | 2 | 8.7 |
| Track and Field | - | 1.3 | 1.7 |
| Volleyball | 2.3 | 2 | 10.3 |
| Synchronized Swim | - | - | 1 |
| Archery | - | - | 2.7 |
| Softball | - | - | 3.3 |

TABLE IV (Continued!


## TABLE IV (Continued)

| Sport | Year $71-72$ | Year 72-73 | Year $73-74$ | Sport |  | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | Year $72-73$ | Year $73-74$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nebraska (4) |  |  |  | New Jersey (2) |  |  |  |  |
| Basketball | 12 | 12 | 14.5 |  | Basketball | 12 | 13.5 | 13.5 |
| Softball | 12.8 | 13 | 12.5 |  | Diving | - | - | 5 |
| Tennis | 1 | - | - |  | Fencing | - | - | 9 |
| Volleyball | 13.8 | 17.5 | 14.8 |  | Gymnastics | - | 1 | 1 |
|  |  |  |  |  | Competitive Swim | 5 | 5 | 5 |
| Nevada (1) |  |  |  |  | Volleyball | - | 1 | 1 |
| Basketball | 10 | 10 | 10 | New Mexico (1) |  |  |  |  |
| Gymnastics | 10 | 10 | 10 |  |  |  |  |  |
| Softball | 6 | 6 | 6 |  | Badminton | - | - | 3 |
| Volleyball | 10 | 10 | 10 | Basketball |  | - | - | 17 |
|  |  |  |  | Diving |  | - | - | 5 |
| New Hampshire (1) |  |  |  | Golf |  | - | - | 4 |
|  |  |  |  | Gymnastics |  | - | - | 6 |
| Basketball | 10 | 10 | 10 | Softball |  | - | - | 8 |
| Field Hockey | 8 | 8 | 8 | Competitive Swim |  | - | - | 5 |
| Gymnastics | 4 | 4 | 4 | Tennis |  | - | - | 9 |
| Lacrosse: | 6 | 6 | 6 | Track and Field Volleyball |  | - | - | 4 |
| Skiing | 7 | 7 | 7 |  |  | - | 14 |
| Competitive Swim | 8 | 8 | 8 |  |  |  |  |  |  |
| Tennis | 10 | 10 | 10 |  |  |  |  |  |
| Volleyball | 8 | 8 | 8 |  |  |  |  |  |

## TABLE IV (Continued)

| Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ | Sport | Year <br> 71-72 | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New York (7) |  |  |  | North Dakota (3) |  |  |  |
| Basketball | 11.4 | 12.7 | 13.5 | Badminton | - | . 7 | 1.7 |
| Bowlịng | .71 | . 86 | 1.14 | Basketball | 6 | 11 | 15.3 |
| Field Hockey | 6.4 | 6.6 | 5.9 | Golf | 2 | 2.3 | 2.3 |
| Competitive Swim | 3.4 | 3.7 | 4.7 | Gymmastics | 5 | 4.7 | 3 |
| Tennis | 6.9 | 7.7 | 8.3 | Softball | . 7 | 3.3 | 4.7 |
| Volleyball | 1.14 | 2 | 4.7 | Tennis | 1.7 | 2.3 | 2.3 |
| Gymnastics | . 71 | 1.14 | 1.6 | Track and Field | 6.7 | 7 | 8.3 |
| Softball | 5.4 | 6.1 | 6.9 | Volleyball | 4.3 | 4.3 | 5 |
| Synchronized Swim | . 29 | . 29 | - |  |  |  |  |
| Fencing | 1 | 1.14 | 3.4 | Ohio (8) |  |  |  |
| Track and Field | - | . 71 | 1.9 |  |  |  |  |
| Lacrosse | .71 | . 71 | 1 | Basketball | 4.5 | 6.25 | 9 |
|  |  |  |  | Bowling | . 125 | - | - |
|  |  |  |  | Fencing | . 5 | . 5 | . 75 |
| North Carolina (8) |  |  |  | Field Hockey | 2.25 | 2.87 | 6.5 |
|  |  |  |  | Diving | - | - | . 625 |
| Basketball | 11 | 15.1 | 14.3 | Golf | . 5 | . 87 | 2 |
| Field Hockey | 4.3 | 5.3 | 7.4 | Gymnastics | . 625 | 1 | 1 |
| Golf | . 4 | 2.8 | 3 | Lacrosse | . 25 | . 5 | 1.87 |
| Gymnastics | . 5 | 2.8 | 3.5 | Softball | 1.6 | 3 | 2 |
| Competitive Swim | 3.6 | 3.8 | 3.9 | Competitive Swim | 1.37 | 1.37 | 2.12 |
| Tennis | 4.6 | 6.5 | 9.5 | Synchronized Swim | . 125 | . 125 | . 125 |
| Track and Field | 1.8 | 1.8 | 1.8 | Tennis | 3.75 | 5.5 | 7 |
| Volleyball | 12.4 | 16.1 | 15.5 | Track and Field | . 375 | . 87 | . 625 |
|  |  |  |  | Volleyball | 5.87 | 8.25 | 11.12 |

## TABLE IV (Continued)

| Sport | Year $71-72$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ | Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oklahoma (3) |  | Oregon (2) (Continued) |  |  |  |  |  |
| Archery | 1 | 1 | 1 | Synchronized Swim | . 5 | - | - |
| Badminton | 3.3 | 3.6 | 3 | Tennis | 8 | 8 | 9 |
| Basketball | 8 | 14.3 | 16.3 | Track and Field | 5.5 | 5.5 | 6 |
| Field Hockey | 5.3 | 6.3 | 7.66 | Volleyball | 11 | 11 | 10 |
| Bowling | 1 |  | - |  |  |  |  |
| Fencing | 3.3 | 2.6 | 1.3 | Pennsylvania (8) |  |  |  |
| Golf | F. 6 | 2 | 3.6 |  |  |  |  |
| Competitive Swim | - | 1.66 | 2.66 | Archery | . 4 | . 4 | - |
| Softball | 3.66 | 3.66 | 6 | Badminton | . 8 | . 8 | . 8 |
| Tennis | 2 | 6.33 | 9 | Basketball | 6 | 6.9 | 9.8 |
| Track and Field | - | 1.33 | 5 | Bowling | . 8 | . 8 | . 8 |
| Volleyball | 5.3 | 10.3 | 13 | Diving | 1.8 | 1.9 | 2.3 |
|  |  |  |  | Fencing | . 6 | . 8 | 2 |
| Oregon. (2) |  |  |  | Field Hockey | 6.1 | 6.5 | 7.9 |
|  |  |  |  | Golf | - | - | . 1 |
| Badminton | 2.5 | 3 | 1 | Gymnastics | 2.6 | 3.1 | 3.2 |
| Basketball | 11 | 12 | 12 | Lacrosse | . 8 | . 8 | . 3 |
| Bowling | 7 | 8 | 8 | Softball | - | . 3 | 1.6 |
| Diving | 3.5 | 4 | 4 | Competitive Swim | 4 | 6 | 7 |
| Field Hockey | 12 | 12 | 13 | Tennis | 3.6 | 3.8 | 5.1 |
| Golf | - | 1. | 2.5 | Track and Field | 3 | . 4 | 1.1 |
| Gymnastics | 4 | 4.5 | 5 | Volleyball | 4.3 | 5 | 6.9 |
| Softball | 8.5 | 10 | 11 |  |  |  |  |
| Competitive Swim | 3.5 | 4 | 4 | , |  |  |  |

TABLE IV (Continued)

| Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | Year $73-74$ | Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 73-74 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rhode Island (1) | South Dakota (3) |  |  |  |  |  |  |
| Badminton | - | 1 | - | Basketball | 3 | 4 | 7 |
| Basketball | - | - | 13 | Field Hockey | 1.3 | 1.3 | 1.3 |
| Field Hockey | - | 1 | 9 | Softball | 1.3 | - | 5 |
| Gymnastics | - | 1 | 7 | Tennis | - | - | . 7 |
| Lacrosse | - | 2 | 6 | Track and Field | 1.3 | 1.3 | 1 |
| Soccer | - | - | 1 | Volleyball | 2.3 | 4.7 | 11.3 |
| Softball | - | - | 5 |  |  |  |  |
| Competitive Swim | - | 4 | 8 | Tennessee (6) |  |  |  |
| Synchronized Swim | - | 2 | 4 |  |  |  |  |
| Tennis | 12 | 12 | 16 | Badminton | 1.8 | 2.3 | 2.7 |
| Volleyball | , | 1 | 4 | Basketball | 16.5 | 18 | 17.5 |
| Ice Hockey | 4 | 5 | 9 | Gymnastics | 1 | . 6 | . 6 |
|  |  |  |  | Competitive Swim | - | . 3 | . 3 |
| South Carolina (3) |  |  |  | Softball | . 6 | 1.13 | 1.7 |
|  |  |  |  | Tennis | 7.8 | 7.2 | 9 |
| Badminton | 3.3 | 2 | . 7 | Track and Field | 1.2 | 1.5 | 1 |
| Basketball | 6.7 | 9.3 | 11.3 | Volleyball | 10.8 | 13.5 | 23 |
| Field Hockey | 4.3 | 3.3 | 3.3 | Bowling | - | . 2 | . 2 |
| Gymnastics | 1 | - | - |  |  |  |  |
| Competitive Swim | - | 1.3 | 1.7 | Texas (7) |  |  |  |
| Synchronized Swim | - | . 7 | 1 |  |  |  |  |
| Softball | 4.7 | 5.3 | 6 | Badminton | 3.28 | 4.85 | 5.28 |
| Tennis | 4 | 4.7 | 8.3 | Basketball | 12.85 | 15.14 | 19.71 |
| Volleyball | 6.7 | 6.7 | 6.7 | Bowling | 2.85 | 2.85 | 2.85 |

TABLE IV (Continued)


TABLE IV (Continued)

| Sport | Year $71-72$ | Year $72-73$ | Year $73-74$ | Sport | Year $71-72$ | Year $72-73$ | Year $73-74$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Washington (7) |  |  |  | West Virginia (4) |  |  |  |
| Basketball | 12.1 | 14.6 | 17 | Badminton | - | 1 | 1.5 |
| Field Hockey | 7.9 | 10.6 | 11.6 | Basketball | 5 | 7 | 11 |
| Gymnastics | 3.4 | 4.6 | 6.1 | Bowling | - | . 5 | . 5 |
| Skiing | 2 | 2 | 2 | Field Hockey | 5.25 | 5 | 5.25 |
| Competitive Swim | 1.7 | 3 | 3.1 | Golf | 2 | 2 | 2.25 |
| Track and Field | 2.9 | 3.7 | 4.7 | Gymnastics | - | - | 2 |
| Volleyball | 17 | 18 | 20.3 | Lacrosse | 1.25 | 2 | 2 |
| Tennis | 9.7 | 10.9 | 11.1 | Softball | 1 | - | - |
| Bowling | . 29 | . 29 | . 29 | Competitive Swim | 3 | 1.25 | 1.75 |
| Diving | - | . 42 | . 71 | Tennis | 6.5 | 5 | 9.5 |
| Golf | - | - | -. 42 | Track and Field | . 5 | . 25 | - |
| Crew | .71 | . 71 | . 71 | Volleyball | 4.75 | 6 | 8.25 |
| Badminton | . 42 | . 57 | . 71 |  |  |  |  |
| Synchronized Swim | . 29 | - | - | Wisconsin (6) |  |  |  |
| Washington, D.C. (1) |  |  |  | Badminton | . 66 | 2.33 | 2.66 |
|  |  |  |  | Basketball | 7.16 | 9.5 | 10.6 |
| Basketball | 25 | 23 | 24 | Diving | . 66 | 1.33 | 1.66 |
| Tennis | 6 | 8 | - | Fencing | 1 | 1.33 | 2 |
| Volleyball | - | - | 12 | Field Hockey | 3.83 | 4.66 | 5 |
|  |  |  |  | Golf | . 33 | 1.33 | 1.66 |
|  |  |  |  | Gymnastics | 6 | 7.83 | 10 |
|  |  |  |  | Softball | 1.66 | - | - |
|  |  |  |  | Squash | . 33 | .33 | . 33 |

TABLE IV (Continued)

| Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 73-74 \end{aligned}$ | Sport | $\begin{aligned} & \text { Year } \\ & 71-72 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 72-73 \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & 73-74 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wisconsin (6) (Continued) |  |  |  |  |  |  |  |
| Competitive Swim | 4.5 | 6.16 | 7.16 |  |  |  |  |
| Synchronized Swim | . 33 | . 33 | . 5 |  |  |  |  |
| Tennis | 2.83 | 5.16 | 7.5 |  |  |  |  |
| Track and Field | 4.66 | 7.16 | 9.66 |  |  |  |  |
| Volleyball | 6.5 | 9.5 | 11.33 |  |  |  |  |
| Crew | - | .33 | . 66 |  |  |  |  |
| Wyoming (1) |  |  |  |  |  |  |  |
| Basketball | 10 | 10 | 12 |  |  |  |  |
| Diving | - | - | 7 |  |  |  |  |
| Field Hockey | 5 | 8 | 5 |  |  |  |  |
| Softball | 6 | 5 | 6 |  |  |  |  |
| Track and Field | 4 | 4 | 4 |  |  |  |  |
| Volleyball | 10 | 10 | 8 |  |  |  |  |
| Competitive Swim | - | 4 | 7 |  |  |  |  |

## Budget Data

Budget comparisons were made by utilizing a ratio involving the number of women students, and the number of women's sports. The women's athletic budget at each institution was divided into the total number of women students at the institution. This provided a money per woman student statistic. Then, the money per student was divided into the number of sports offered in the women's intercollegiate program to arrive at the money per sport for each woman. The investigator noted from the data (Table $V$ ) that the money per woman student ranged from a high of $\$ 28.57$ in $1973-74$ to a low of $\$ 0.43$; in $1974-75$ to a high of $\$ 42.86$ with a low of $\$ 0.38$. The average money per student was $\$ 3.76$ in 1973-74 and \$7.22 in 1975. The money per sport for each woman was a high of $\$ 7.14$ with a low of $\$ 0.04$ in 1974-75. The average money per sport in 1973-74 was $\$ 0.92$ and in 1974-75, $\$ 1.41$. The increase in money from 1973-75 was indicative of the growth experienced by the women's athletic programs.

The study by Murphy and Vincent in 1973 on budget for 213 AIAW members showed Regions IA-(Northeast), IB-(Northeast), 3-(Southeast), 7-(Rocky Mountain) and 9-(Pacific Northwest) ranked in the upper group of regions with larger average budgets per school and per student and larger average budgets per sport. Regions 2-(Mid South), 4-(Southwest), 5-(Midwest), 6-(Midwest and Plains), and 8-(Far West) composed the lower regions with generally lower budgets in all aspects. The largest average budgets per school were received by the largest schools. The most consistent pattern being that schools with total enrollments of from 15,000-19,000 received comparably larger budgets per school offered a larger number of sports per school and have larger budgets per school.

TABLE V

BUDGET DATA

|  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Money | Money | Money | Money |
|  | per | per | per | per |
| State | Student | Sport | Student | Sport |
|  |  | $1973-74$ | $1974-75$ |  |

Alabama

| Univ. of Montevalls | 1.25 | 0.31 |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Univ. of Alabama | 2.25 | 0.43 | 19.65 | 3.28 |
| Florence State Univ. | 1.60 | 0.23 | 4.60 | 0.66 |

## Arizona

Arizona State Univ.
6.26
0.78
16.05
2.01

Arkansas
Univ. of Arkansas
0.73
0.15
5.11
1.02

California

Colorado

| Southern Colorado State College | 2.50 | 0.42 | 8.00 | 1.33 |
| :--- | :--- | :--- | :--- | :--- |

## Connecticut

| West Connecticut State College | 5.00 | 0.83 | 7.50 | 1.25 |
| :--- | :--- | ---: | ---: | ---: |
| Towson State College | 8.00 | 1.00 | 10.86 | 1.36 |

Delaware
Univ. of Delaware
1.80
0.36
2.62
0.65

Florida

| Univ. of South Florida | 1.92 | 0.27 | 2.35 | 0.34 |
| :--- | :--- | :--- | :--- | :--- |
| Univ. of Florida | 4.25 | 0.71 | 7.73 | 1.29 |

TABLE V (Continued)

| State | Money <br> per Student | Money per Sport | Money per Student | Money <br> per Sport |
| :---: | :---: | :---: | :---: | :---: |
|  | 1973-74 |  | 1974-75 |  |
| Georgia |  |  |  |  |
| Shorter College | 4.29 | 4.29 | $5 \cdot 71$ | 5.71 |
| North Georgia College | 2.55 | 1.27 |  |  |
| Univ. of Georgia | 1.67 | 0.28 | 11.11 | 1.85 |
| Athens College | 4.81 | 0.80 | 16.03 | 2.67 |
| West Georgia College | 1.71 | 0.34 | 3.99 | 0.80 |
| Fort Valley State College | 0.64 | 0.21 | 3.57 | 1.19 |
| Hawaii |  |  |  |  |
| Univ. of Hawaii | 2.62 | 0.52 | 4.85 | 0.97 |
| Idaho |  |  |  |  |
| Idaho State Unive at Pocatello | 5.55 | 0.46 | 5.55 | 0.46 |
| College of Idaho at Caldwell | 5.00 | 1.25 | 6.67 | 1.67 |
| Illinois |  |  |  |  |
| Southern Illinois Univ. at |  |  |  |  |
| Northern Illinois Univ. | 1.71 | 0.17 | 2.10 | 0.21 |
| Southern Illinois Univ. (Edwardsville) | 3.52 | 0.88 | 4.40 | 1.10 |
| Greenville College | 7.33 | 1.47 | 7.78 | 1.56 |
| North Central College | 3.00 | 1.00 | 3.00 | 1.00 |
| Rockford College | 6.00 | 1.20 | 6.00 | 1.20 |
| Univ. of Illinois | 0.45 | 0.04 | 6.68 | 0.67 |
| Chicago State Univ. | 7.02 | 1.17 | 7.60 | 1.27 |
| Indiana |  |  |  |  |
| Butler State Univ. |  |  | 0.77 | 0.19 |
| Franklin College | 9.00 | 2.25 | 9.00 | 2.25 |
| Ball State Univ. | 2.13 | 0.21 | 4.49 | 0.45 |
| Iowa |  |  |  |  |
| Drake Univ. | 2.13 | 0.36 | 8.88 | 1.48 |
| Univ. of Northern Iowa | 0.95 | 0.19 | 2.20 | 0.44 |
| Kansas |  |  |  |  |
| McPherson College | 4.80 | 0.96 | 6.80 | 1.36 |
| Sterling College | 3.75 | 1.25 | 11.00 | 3.67 |

TABLE V (Continued)

| State | Money per Student | Money per Sport | Money per Student | Money per Sport |
| :---: | :---: | :---: | :---: | :---: |
|  | 1973-74 |  | 1974-75 |  |
| Kentucky |  |  |  |  |
| Eastern Kentucky Univ. | 0.86 | 0.17 | 1.10 | 0.22 |
| Centre College | 4.00 | 1.33 |  |  |
| Murray State Univ. | 1.36 | 0.34 | 3.01 | 0.75 |
| Western Kentucky Univ. | 1.07 | 0.36 |  |  |
| Univ. of Louisville | 2.81 | 0.70 | 6.65 | 1.66 |
| Maine |  |  |  |  |
| Colby College | 3.82 | 0.33 | 9.73 | 0.88 |
| Maryland |  |  |  |  |
| Univ. of Maryland | 0.81 | 0.10 | 1.62 | 0.20 |
| Massachusetts |  |  |  |  |
| Northeastern Univ. | 5.56 | 0.56 | 5.56 | 0.56 |
| Michigan |  |  |  |  |
| Univ. of Michigan |  |  | 4.82 | 0.80 |
| Calvin College | 3.82 | 0.64 | 3.82 | 0.64 |
| Minnesota |  |  |  |  |
| Moorhead State College | 1.54 | 0.17 |  |  |
| Saint Cloud State College | 1.80 | 0.20 | 3.03 | 0.34 |
| Concordia College | 28.57 | 4.08 | 48.86 | 6.12 |
| Mississippi |  |  |  |  |
| Mississippi College | 1.20 | 0.30 | 3.10 | 0.78 |
| Missouri |  |  |  |  |
| School of the Ozarks | 5.00 | 1.67 | 5.60 | 1.87 |
| Southwest Missouri State. | 4.36 | 0.48 | 21.28 | 2.36 |
| Ṅebraska |  |  |  |  |
| Chadron State College | 2.24 | 0.75 | 3.95 | 1.32 |
| Univ. of Nebraska | 1.22 | 0.41 | 3.00 | 1.00 |
| Midland Lutheran College | 9.09 | 2.27 |  |  |
| Wayne State College | 3.00 | 1,00 | 5.00 | 1.67 |
| New Hampshire, |  |  |  |  |
| Univ. of New Hampshire | 1.74 | 0.22 | 4.23 | 0.53 |

TABLE V (Continued)

|  | Money <br> per <br> Student | Money <br> per <br> Sport | Money <br> per <br> Student | Money <br> per <br> Sport |
| :--- | :---: | :---: | :---: | :---: |
| State | l973-74 | $1974-75$ |  |  |

North Dakota
Dickinson State College $4.50 \quad 1.13$
2.120 .30

Minot State College
2.55
0.32

Ohio

| Baldwin-Wallace College | 5.17 | 0.86 | 9.83 | 1.64 |
| :--- | :--- | :--- | :--- | :--- |
| Bowling State Univ. | 4.51 | 0.38 | 4.51 | 0.38 |
| Univ• of Dayton | 1.19 | 0.24 | 8.31 | 1.66 |
| Univ. of Toledo | 0.73 | 0.12 |  |  |
| Ohio Univ. | 0.42 | 0.05 | 2.86 | 0.32 |
| Mount Union College | 2.83 | 0.71 | 4.17 | 1.04 |
| Ohio Wesleyan Univ. | 7.07 | 1.18 | 9.95 | 1.66 |

## Oklahoma

| Oklahoma State Univ. | 1.24 | 0.16 | 7.88 | 0.99 |
| :--- | :--- | :--- | :--- | :--- |
| Central State Univ. | 1.00 | 0.10 | 1.10 | 0.11 |
| Northwestern State Univ. | 2.30 | 0.63 | 3.00 | 0.75 |

TABLE V (Continued)

| State | Money per Student | Money per Sport | Money per Student |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1973-74 |  | 1974-75 |  |
| Oregon |  |  |  |  |
| Univ. of Oregon | 3.85 | 0.32 | 6.41 | 0.53 |
| Pacific Lutheran Univ. | 4.31 | 0.62 | 5.88 | 0.84 |
| Pennsylvania |  |  |  |  |
| Clarion State College | 6.87 | 1.72 | 8.09 | 2.02 |
| Indiana Univ. | 0.43 | 0.14 | 0.38 | 0.13 |
| Bucknell Univ. | 10.00 | 2.00 | 12.96 | 2.59 |
| Rhode Island |  |  |  |  |
| Brown Univ. | 5.71 | 0.48 | 17.86 | 1.49 |
| South Carolina |  |  |  |  |
| Lander College | 2.29 | 0.33 | 9.52 | 1.36 |
| Coker College | 3.47 | 0.58 |  |  |
| South Dakota |  |  |  |  |
| Blackhills State College | 0.88 | 0.29 | 1.75 | 0.58 |
| Dakota State College | 4.00 | 1.33 |  |  |
| Northern State College | 2.23 | 0.45 | 2.74 | 0.55 |
| Tennessee |  |  |  |  |
| Univ. of Tennessee | 0.82 | 0.21 | 1.09 | 0.27 |
| Lambath College | 5.13 | 1.71 | 7.69 | 2.56 |
| Middle Tennessee State Univ. | 0.44 | 0.23 | 4.59 | 2.29 |
| Menphis State Univ. | 1.00 | 0.14 | 2.00 | 0.29 |
| Univ. of Tennessee at at Chattanooga | 0.46 | 0.23 | 4.59 10.50 | 2.29 |
| Milligan College | 7.50 | 1.30 | 10.50 | 2.00 |
| Texas |  |  |  |  |
| Tarleton State College | 2.68 | 0.38 |  |  |
| Stephen F. Austin State Univ. | 2.80 | 0.47 | 8.00 | 1.33 |
| Texas Christian Univ. | 0.59 | 0.05 |  |  |
| Texas Tech Univ. | 1.04 | 0.12 | 2.24 | 0.25 |
| Prairie View A \& M Univ. | 1.25 | 0.63 |  |  |
| Utah |  |  |  |  |
| Univ. of Utah | 1.91 | 0.17 | 5.63 | 0.51 |

## TABLE V (Continued)

| State | Money <br> per Student | Money per Sport | Money per Student | Money per Sport |
| :---: | :---: | :---: | :---: | :---: |
|  | 1973-74 |  | 1974-75 |  |
| Virginia |  |  |  |  |
| Bridgewater College | 10.71 | 2.68 | 14.36 | 3.59 |
| College of William and Mary | 19.17 | 1.47 | 30.72 | 2.36 |
| Virginia Poly Int. and State Univ. | 1.06 | 0.15 | 1.20 | 0.17 |
| Washington |  |  |  |  |
| Central Washington State College | 4.04 | 0.67 | 7.12 | 1.19 |
| Seattle Pacific College | 2.87 | 0.36 |  |  |
| Gonzaga Univ. | 5.30 | 1.33 | 10.00 | 2.50 |
| Federal City College | 5.16 | 1.72 |  |  |
| West Virginia |  |  |  |  |
| West Virginia Univ. | 1.77 | 0.59 | 3.16 | 1.05 |
| West Virginia State College | 1.79 | 0.26 | 1.79 | 0.26 |
| Marshall Univ. | 3.11 | 0.37 | 10.00 | 1.11 |
| Wisconsin |  |  |  |  |
| Univ. of Wisconsin-River Falls | 5.81 | 0.73 | 10.50 | 1.31 |
| Univ. of Wisconsin-Stevens Pt. | 1.93 | 0.24 | 2.86 | 0.36 |
| Univ. of Wisconsin-Menomonie | 2.65 | 0.53 | 3.00 | 0.60 |
| Wyoming |  |  |  |  |
| Univ. of Wyoming | 2.21 | 0.32 | 3.78 | 0.54 |

The minimal budget needed, or that budget considered adequate to administer an intercollegiate program for women broad enough to meet their needs, was an average of $\$ 21,600$ as compared to the $1973-74$ average budget of $\$ 8,900$. Thus, the $1973-74$ average budget was considered to be approximately 40 per cent of that needed to offer an adequate program for women. The 1972-74 average budget per sport was only $\$ 1,600$ and the projected budget, even if no other sports were offered, would allow an average budget per sport of only $\$ 3,600$.

The period 1973-77 may be the beginning of a budget boom for women's athletics. One would dare say that today very few of the women's programs can manage on less than $\$ 100,000$. For example, Kansas State University has $\$ 280,000$ plus $\$ 15,000$ for scholarships in 1976. The University of New Mexico had a $\$ 480,000$ budget approved for 1976. Budget increases for women's athletics was comparable to scholarships. The rapid increase in monies allocated for women's athletic programs makes it impossible to keep the data current.

## National Tournament Results

The national AIAW tournament results from 1973-75 have been plotted on the map (Figure 3), by their rank in the national AIAW national tournaments.

Regions 8-(Far West), 3-(Southeast), 5-(Midwest), and 7-(Rocky Mountain) ranked in the upper group of regions with larger national results for 1971-75. Regions IA and IB (Northeast), 2-(Mid South), 4-(Southwest), 6-(Midwest and Plains), and 9-(Pacific Northwest) ranked in the lower group of regions.' California had eight national winners and a total of 27 second through loth place winners with a total of 12 other place winners. In Region 1B(Pennsylvania), had a total of three national winners and eight other place winners. From Region 4 (Texas) there were three national winners and 17 other national place winners. The majority of national winners came from the northeast area, with others from the east, west, and coastal south. Very few winners have emerged from the mid-west areas of the United States.

Table VI breaks down the national winners into the sport or sports that each school had won in the national AIAW tournament in 1973, 1974, 1975, 1976 and 1977. A detailed description of the national winning schools (Chapter V) gave insight into why those schools believed their teams had been national winners. Looking at the AIAW national champions in the specific sports one sees badminton dominated by California, Arizona, Texas, and Illinois, and basketball superiority, existed in Pennsylvania and Connecticut. California dominated basketball in the west, and Texas was the strongest southern representative. Excellence in golf was found in the warmer climates of California, Florida and Arizona; and excellence in gymnastics was found in the northeast region with Massachusetts, Indiana and Illinois. Volleyball, like golf, seemed to be located in the warmer climates of Hawaii, California, and Texas.

TABLE VI
NATIONAL CHAMPION:SHEPS

## Badminton

1970
1974 (Continued)

1. California State University Long Beach
2. Western Washington State College
3. Arizona State University

## 1971

1. Arizona State University
2. California State UniversityLong Beach
3. Illinois State University

1972

1. Pasadena City College
2. Arizona State University
3. California State UniversityLong Beach

1973
6. Arizona State University
7. Eastern Illinois University
8. Portland State
9. Ball State University
10. University of Iowa

1975

1. Arizona State University
2. California State UniversityLong Beach
3. University of WisconsinLaCrosse.
4. Western Illinois University
5. Illinois Western University
6. Memphis State University
7. Ball State University
8. University of Houston
9. West Chester State Pennsylvania
10. Indiana State University
11. Pasadena City College
12. Stephen F. Austin University
13. Arizona State University
14. Bell State University
15. Illinois State University
16. Memphis State University
17. Florida State University
18. Mississippi College for Women
19. Bates College
20. University of Tennessee

1974
1976

1. Arizona State University
2. University of Houston
3. California State UniversityLong Beach
4. .- Univergity of Wisconsin LaCrosse
5. San Diego State University
6. West Chester State College Pennsylvania
7. California State UniversityLong Beach
8. Stephen F. Apstin State Univ.
9. University of Wisconsin
10. Illinois State University
11. Western Illinois University

## Basketball

1972

1. Immaculata College
2. West Chester State College
3. California State
4. Mississippi State College
5. Queens State College
6. California State
7. Illinois State University
8. University of Tennessee
9. South Dakota State University
10. Southern Connecticut State College

1973

1. Immaculata College
2. Queens College - New York
3. Southern Connecticut State
4. Indiana University
5. Kansas State University
6. University of South Carolina
7. Indiana State University
8. Western Washington State
9. Cal-State University -

Long Beach
10. Mercer University - Georgia

1974

1. Immaculata College
2. Mississippi College
3. Southern Connecticut State College
4. William Penn College
5. Wayland Baptist College
6. Tennessee Tech
7. Indiana University
8. Queens College
9. East Stroudsberg
10. Stephen F. Austin University

1975

1. Delta State, Mississippi
2. Immaculata College
3. California State UniversityFullerton
4. Southern Connecticut State College
5. Wayland Baptist College

1976

1. Delta State College
2. Immaculata College
3. Wayland Baptist College
4. William Penn College
5. Tennessee Tech
6. Montclair State - New Jersey

1977

1. Delta State College
2. Louisiana State University
3. University of Tennessee
4. Immaculata College
5. Baylor University
6. Southern Connecticut State College

## TABLE VI (Continued)

## Gymnastics

1971

1. Springfield College
2. Indiana State University
3. University of Nevada
.4. Towson State College
4. Eastern Washington State College
5. Washburn University - Topeka
6. Kent State University
7. Gustavus Adolphus College-

Minnesota
9. University of Washington
10. Grand View College

1972

1. Springfield College
2. Southwest Louisiana College
3. Southern Illinois University
4. University of Massachusetts
5. Indiana State University
6. Clarion State - Pennsylvania
7. East Washington State College
8. Kent State Universïty
9. University of Washington
10. Gustavus Adolphus College

1973

1. University of Massachusetts
2. Southern Illinois University
3. Indiana State University
4. Springfield College
5. Southeast Louisiana State University

1974

1. Southern fllinois University
2. Southwest Mississippi Junior College
3. University of Massachusetts
4. Springfield College
5. Seattle Pacific College

1975

1. Southern Illinois University
2. University of Massachusetts
3. Southwest Mississippi

Junior College
4. Springfield College
5. Pennsylvania State University

1976

1. Clarion State CollegePennsylvania
2. Southwest Missouri State University
3. California State UniversityFullerton
4. Southern Illinois University
5. Pennsylvania State University

TABLE VI (Continued)

Golf

1971

1. University of Californis Los Angeles
2. Arizona State University

1972

1. University of Miami
2. Florida State University
3. University of Arizona
4. California State University Fullerton
5. Miami-Dade Junior College
6. Arizona State University
7. University of California Los Angeles
8. North Carolina - Greensboro
9. University of Florida
10. California State - Los Angeles

1973

1. North Carolina - Greensboro
2. Rollins
3. Arizona State University
4. University of Arizona
5. Michigan State University
6. Miami Dade - Junior College
7. University of Florida
8. Furman University
9. Ithaca
10. Cornell

1974

1. Rollins College
2. University of Miami
3. Furman University
4. Arizona State University
5. University of Florida
6. University of Texas
7. Michigan State University

1974 (Continued)
8. University of Arizona
9. Miami-Dade Junior College
10. 'Auburn University

## 1975

1. Arizona State University
2. Miami-Dade Community College
3. University of Florida

1976

1. Furman University
2. University of Tulsa
3. Arizona State University
4. University of Florida
5. Miami-Dade North
6. University of Miami
7. Houston State University
8. Michigan State University
9. Rollins College
10. University of Arizona

## TABLE VI (Continued)

## Volleyball

1972

1. California State University Long Beach
2. Brigham Young University
3. University of California Los Angeles
4. Southwest Texas State University
5. Church College - Hawaii
6. University of California -

Santa Barbara
7. Northeast Illinois University
8. Southwest Missouri State College

1973

1. SUI Ross - Texas
2. San Fernando Valley
3. Santa Barbara - California
4. Southwest Missouri State College

1974

1. California State University -
2. Texas Women's University
3. University of California -

Santa Barbara
4. University of California -

Los Angeles
5. Brigham Young University
6. University of Houston
7. Sam Houston University
8. Southwest Missouri State College

1975

1. University of California Los Angeles
2. University of Hawaii
3. University of California Santa Barbara

1975
4. University of Houston
5. University of California Long Beach
6. Texas Wesleyan University

1976

1. University of California Los Angeles
2. University of Hawaii
3. Houston University
4. California State UniversityLong Beach

1977

1. University of Southern California
2. University of California Los Angeles
3. University of Hawaii
4. Pepperdine University
5. University of Houston
6. Brigham Young University
7. Southwest Missouti State University
8. Michigan State University

TABLE VI (Continued)

## Track and Field

| 1972 |  | 1975 |  |
| :---: | :---: | :---: | :---: |
| 1. | Texas Women's University | 1. | University of California Los Angeles |
| 2. | California State College |  |  |
| 3. | California State Polytechnic College |  | Prairie View A \& M TWC |
| 4. | Flathead College - Montana |  | Colorado State University |
| 5. | Eastern Washington |  | Michigan State University |
| 6. | Lane College - Oregon |  | Oregon College of Education |
| 7. | University of Oregon |  |  |
| 8. | University of New Mexico | 1976 |  |
| 9. | Murray State UniversityKentucky |  | Prairie View A \& M |
| 10. | Central Washington State |  | Seattle Pacific University Iowa State University |
| 1973 |  |  | Colorado State University |
| 1. | California State College |  | California State UniversityLos Angeles |
| 2. | Texas Women's University |  |  |
| 3. | Flathead College - Montana |  |  |
| 4. | University of Illinois |  |  |
| 5. | Long Island University |  |  |
| 6. | Brooklyn College |  |  |
| 7. | Western Washington State |  |  |
| 8. | Seattle Pacific College |  |  |
| 9. | Kansas State University |  |  |
| 10. | University of Massachusetts |  |  |

## 1974

1. Prairie View A \& M College
2. University of California Los Angeles
3. TWU
4. California State University -

Los Angeles
5. Iowa State University

TABLE VI (Continued)

## Swimming and Diving

## 1972

1. Arizona State University
2. West Chester State UniversityPennsylvania
3. Colorado State University
4. University of Santa Clara
5. East Stroundslourg Pennsylvania
6. Springfield College -

Massachusetts
7. University of Michigan
8. California State University Long Beach
9. Ball State (Indiana)
10. Central Michigan State College

1973

1. Arizona State University
2. University of Florida
3. University of Michigan
4. Princeton
5. University of New Mexico

1974

1. Arizona State University
2. Miami - Florida
3. Washington University
4. New Mexico
5. University of California -

Los Angeles
6. Princeton
7. Monmouth
8. Florida
9. Virginia Commonwealth
10. University of Oregon

## TABLE VI (Continued)

## Field Hockey

1976

1. West Chester State College Pennsylvania
2. Ursinus College - Pennsylvania
3. Springfield College - Maryland
4. College of William and Mary Virginia
5. Lock Haven State College Pennsylvania

1977

1. West Chester College
2. Ursinus College - Pennsylvania
3. Lock Haven
4. University of Delaware
5. Central Michigan University
6. Southern Connecticut

University
7. Bemiji College
8. Central Missouri University

## Cross Country

1977

1. Towa State University
2. California State University Northridge
3. University of Wisconsin Madison
4. Michigan State University
5. Pennsylvania State University

Track and Field was predominantly in the southern states of California and Texas, and then more noticeable in the northwest with Colorado and north with Iowa. Arizona, Florida, and California, the warm weather states, dominate the scene in swimming and diving.

## Scholarship Data

Scholarships for women have increased at such a rapid rate, that it is impossible to keep the data current. AIAW stated, "Financial aid is a new area for AIAW colleges and universities. The directory is only a partial listing, as schools not listed giving scholarships in the directory may be doing so." ${ }^{1}$ One can see from Figure 4, that there has been an increase in schools offering scholarships from 1973-1975. The schools that offered scholarships in 1973 and 1974 continued them in 1975.

In 1973, 16 schools offered scholarships, 23 in 1974 and 30 in 1975, and 121 in 1976 (listed in AIAW Directory), and one would suggest that over half of the AIAW member institutions offered scholarships in 1976-77. Scholarships seemed to dominate in the northwest region from 1973 to 1975. The lowest areas seemed to be in the midwest. The Southeast Region (Region 3), Region 4-(Southwest), 5-(Midwest), 6-(Midwest and Plains), showed in the upper rank of regions with larger numbers of scholarships offered in 1973-74, whereas regions IA and IB-(Northeast), 2-(Mid South), 7-(Rocky Mountain), 8-(Far West), and 9-(Pacific Northwest) were in the lower group. Florida, California and Arizona have offered the most scholarships per state. For example, Arizona State ,University offered 15 scholarships in 1974, 30 in 1975, and 60 in 1976.

INTERCOLLEGIATE WOMEN'S ATHLETICS
SCHOLARSHIPS


The reason for such an increase in scholarships the part few years was due to Title IX, money, and the rapid growth of women's athletics. The national winners were coming from those states that offered schoilarships (Table VII). With the change in the intercollegiate policies, one now sees a rapid increase of scholarships that are being offered. Also, the schools who have always offered scholarships and could not compete because of the previous AIAW rule, will more than likely be joining AIAW, and in turn will immediately raise the number and percentage of scholarships offered within the regions.

Many individuals are concerned and hope that the effects of scholarships will be an asset to the woman athlete, in that she would receive some benefits for all her time and dedication. The author believes that the skilled female athlete, from the high schools, will undoubtedly, select a university where she will receive some money. Why not? Prestige and money! Where does this leave the school that has no scholarships? With the majority of the institutions offering scholarships, the question now is who can offer the most financial aid in order to entice the student to their respective institution.

## Schools

## Alabama

Athens College
Alaska
University of Alaska

## Arizona

Arizona State University
Central Arizona College

## Arkansas

University of Arkansas - Little Rock

## California

California Lutheran College - Thousand Oaks
University of California - Los Angeles
University of California - Riverside
San Jose State College
University of California - Santa Barbara
California State College - Stanislaus

## Florida

University of Florida - Tampa
University of Florida - Gainesville
Florida International - Miami
Florida State University - Tallahassee
University of Miami - Miami
Rollins College - Winter Park

## Georgia

North Georgia College - Dahlonega
University of Georgia' - Athens
Missouri
Northwest Missouri State College - Maryville
Central Missouri State College - Warrensburg
Southwest Baptist College - Bolivar
Idaho
University of Idaho - Moscow

TABLE VII (Continued)

States

Il.1inois
Southern Illinøis University - Carbondale
Southern Illinois University - Edwardsville
Chicago State University - Chicago
University of Chicago - Chicago
Western Illinois University - Macomb
Lewis College - Lockport

## Indiana

Indiana State University - Terre Haute
Vicennes University - Vicennes
Franklin College - Franklin
Iowa
Grand View College - Des Moines
Graceland College - Lamoni
Westmar College - Lemars

## Kansas

Kansas State Teachers College - Emporia
Southwestern College - Winfield

## Kentucky

Georgetown College

## Maine

Husson College - Bangor

## Massachusetts

North Adams State College - North Adams
Eastern Nazarene College - Wallaston
Minnesota
Saint Cloud State College

## Mississippi

Mississippi State College for Women - Columbus
Blue Mountain College - Blue Mountain
Montana
Eastern Montana College - Billings
Western Montana College - Missoula

## States

## Nebraska

Kearney State College

## Nevada

University of Nevado - Reno
New Jersey
Kean College - Union
Princeton University

## New York

Long Island University - Brooklyn
Robert Wesleyan College - Rochester
Ohio
Ohio University - Athens

## Oklahoma

Phillips University - Enid
Northwestern State University - Alva
Pennsylvania
Immaculata College
Lock Haven State University
Slippery Rock State College
University of Pittsburgh
Shipperburg State College

## Texas

West Texas State College - Canyon
Lamar University - Beaumont
Prairie View A \& M University
Texas Tech University - Lubbock
Utah
Brigham Young Uni ersity - Provo
Washington
Seattle University

## West Virginia

Davis and Elkins College
Marshall University - Huntington
Salem College

## TABLE VII (Continued)

## States

Wisconsin
Northland College - Ashland

For up-date of school who offer scholarships, always check the most recent scholarship offerings in AIAW Handbook.

## Regional Tournament Participation

Regional tournament participation (Figure 5) seemed to be the greatest in Regions IB-(Northeast), 5-(Midwest), 7-(Rocky Mountain), 8-(Far West), and 9-(Pacific Northwest) and the lowest in regions IA-(Northeast), 2-(Mid South), 3-(Southeast), 4-(Southwest), and 6-(Midwest and Plains) (Figure 6). The mean is 2.76 involvement in regionals. Regional participation seemed to be the strongest in Washington, Utah, Colorado, Oregon, California, 'and Pennsylvania. Pennsylvania recorded 100 per cent participation in golf, 31 per cent in swimming; Utah recorded 66 per cent participation in badminton; and Washington recorded 42 per cent in track and field and 23 per cent in swimming. The other states recorded approximately three per cent participation in various sports. Region 4-(Southwest) and others could be low due to the high level of competition within the state and were eliminated before reaching regionals, whereas other regions were high because competition was low within the state. But, as competition becomes stronger, a decline in the number participating may be noted. National tournament participation (Figure 6) dominated in Washington with highs in gymnastics and track and field. California showed 42 per cent participation in volleyball and 20 per cent in badminton. Arizona, Texas, Illinois, Florida, Pennsylvania, Massachusetts, and Indiana were also leading in various sports at the national participation level. The growth of women's sport has required many sacrifices on the part of the competitors and coaching staffs. As with all serious endeavors much time has been required.

INTERCOLLEGIATE WOMEN'S ATHLETICS
regional tournament participation

each block equals $5 \%$

INTERCOLLEGIATE WOMEN'S ATHLETICS
NATIONAL TOURNAMENT PARTICIPATION

each block equals $5 \%$

To determine how much time was spent, a per contest ratio measure was devised. It involved time devoted to women's athletics.

## Hours per week $x$ Length of season in weeks

## Contests per season

From 1971-72 to 1972-73 and 1973-74 an increase was apparent in the time spent per contest (Table VIII). The colleges and universities spending the most practice time per contest seemed to be the national AIAW winners. For example, the University of Florida spent 61.71 hours per contest in diving and 82.29 hours in golf. Hawaii spent 40.0 hours per volleyball contest and were second place winners in the nationals in 1975 and 1976. University of Massachusetts spends 35 hours per contest in gymnastics and placed first in 1973, third in 1974 and second in 1975.

The schools that spent the most time in a given sport seemed to be more successful in that sport. It seemed reasonable to conclude that time was an excellent reflection of emphasis.

In summary, examining the maps and tables of variations in the number of sports, contests per sport, degree of participation, national winners, budget data, and scholarships, it may be noted that these have been definite factors in the growth and development of women's athletics.

TABLE VIII
TIME SPENT PER CONTEST


TABLE VIII (Continued)

| Sports |  | 1972-73 | 1973-74 | Sports |  | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| California |  |  |  | (4) California State Univ. at Los Angeles |  |  |  |
|  |  |  |  | Archery |  |  |  |
| (1) | Badminton | - | 11.25 | Badminton |  | - | 23.33 |
| Badminton |  | - | 16.88 | Basketball |  | - | 10.0 |
| Field Hockey |  |  | 6.0 | Fencing |  | - | 18.67 |
| Golf |  | - | 5.330.63 | Golf |  | - | 22.86 |
| Gymnastics |  | - |  | Competitive Swim Tennis |  | - | 21.0 |
|  | Competitive Swim | - | 18.0 | Track and Field |  | - | $\begin{aligned} & 12.0 \\ & 30.0 \end{aligned}$ |
|  | Tennis | - | $19.29$ | Volleyball |  |  | 2.46 |
|  | Track and Field | - | $12.8$ |  |  |  |  |
|  | Volleyball |  | 10.0 | Univ. of California at San Diego (LaJolla) |  |  |  |
| (2) Stanford Univ. |  |  |  | Badminton |  | - | 7.5 |
|  | Field Hockey | 10.0 | 8.57 |  | Basketball | 5.54 | 6.92 |
|  | Golf | 5.0 | 8.33 |  | Fencing | 21.82 | 21.82 |
|  | Competitive Swim |  | 6.66 |  | Competitive Swim | 7 | 10.71 |
| (3) California State Univ. at Long Beach |  |  |  |  | Volleyball | 7.5 | 6.82 |
|  | Archery | 12.0 | 12.0 |  | Water Polo | - | 15.0 |
|  | Badminton | 1.5 | $\begin{aligned} & 1.6 \\ & 4.88 \end{aligned}$ | (6) Univ. of Santa Clara |  |  |  |
|  | Basketball | 4.8 |  |  |  |  |  |  |  |
|  | Diving | 6.0 | 8.0 | Basketball.. |  | - | $\begin{gathered} 8.0 \\ 34.67 \end{gathered}$ |
|  | Fencing | 9.6 | 8.0 | Competitive Swim |  | 14.67 | 11.0 |
|  | Golf | 10.0 | 7.5 | Tennis <br> Volleyball |  | 15.0 | $\begin{array}{r} 20.0 \\ 8.8 \end{array}$ |
|  | Gymnastics | 15.71 | 18.33 |  |  |  |  |
|  | Competitive Swim | 5.54 | 13.33 |  |  |  |  |
|  | Tennis | 4.42 | 4.67 |  |  |  |  |
|  | Track and Field | - | 12.0 |  |  |  |  |
|  | Volleyball | - | 3.10 |  |  |  |  |



## TABLE VIII (Continued)

| Sports | 1972-73 | 1973-74 | Sports |  | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Colorado |  |  | (2) West Connecticut State College |  |  |  |
| (1) Colorado Women's College |  |  |  | Badminton | 8.0 | 10.0 |
|  | - | - |  | Basketball | 7.2 | 11.66 |
| Basketball | 4.0 | 4.0 |  | Fencing | 11.43 | 11.43 |
| Bowling | - | . |  | Tennis | 10.0 | 8.33 |
| Fencing | 2.0 | - |  | Field Hockey | 8.88 | 8.0 |
| Field Hockey | 6.66 | 9.23 |  | Volleyball | - | 8.0 |
| Gymnastics | - | 16.0 | Delaware |  |  |  |
| Lacrosse | 0.85 | 0.85 | Univ. of Delaware |  |  |  |
| Skiing | 9.6 | 9.6 |  |  |  |  |
| Softball | 2.22 | 2.66 |  | Field Hockey | 10.0 | 10.0 |
| Competitive Swim | 9.33 | 7.0 |  | Competitive Swim | 15.0 | 10.91 |
| Tennis | 3.2 | 4.27 |  | Tennis | 11.25 | 10.0 |
| Volleyball | 4.57 | 9.14 |  | Voileyball | - | 9.29 |
| (2) Southern Colorado State College |  |  | Florida : 0.29 |  |  |  |
| Basketball | - | 10.0 |  |  |  |  |
| Gymnastics | - | 31.5 | (1) Fl | ida Int. Universi |  |  |
| Softball | 11.43 | 8.0 |  | Golf | 30.0 | 18.0 |
| Track and Field | - | 20.0 |  | Softball | 2.63 | 2.88 |
| Volleyball | - | 6.0 |  | Voll eyball | 3.43 | 2.61 |
| Connecticut |  |  | (2) Univ. of South Florida |  |  |  |
|  |  |  |  | Basketball | 4.92 | 3.55 |
| $\frac{\text { (1) Bridgeport Univ. }}{\text { Field Hockey }}$ | 12.5 | 12.5 |  | Bowling | - |  |
| Field Hockey |  |  |  | Competitive Swim |  | 16.0 |
|  |  |  |  | Tennis | 2.74 | 1.57 3.0 |

TABLE VIII (Continued)


TABLE VIII (Continued)


TABLE VIII (Continued)

| Sport | 1972-73 | 1973-74 | Sports | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Illinois (Continued) <br> (7) Univ. of Illinois |  |  | Indiana |  |  |
|  |  |  | (1) Butler State Univ. |  |  |
| Basketball | 5.6 | 7.0 | Basketball | - | 4.8 |
| Field Hockey | 10.5 | - | Field Hockey | - | 3.33 |
| Golf | 14.0 | 16.8 | Volleyball | - | 1.25 |
| Gymnastics | 10.5 | - |  |  |  |
| Softball | 10.5 | - |  |  |  |
| Competitive Swim | 10.5 | 10.5 | Field Hockey Softball | $9 \cdot 38$ | $9 \cdot 38$ |
| Tennis | - | 10.5 | Softball |  |  |
| Track and Field | 14.0 | 10.5 | (3) Ball State Univ. |  |  |
| Volleyball | 6.0 | 5.25 | Badminton | 16.0 | 12.0 |
| (8) Chicago State Univ. |  |  | Field Hockey | 12.0 | 9.0 |
| $\frac{\text { (8) Chicago State Univ }}{\text { Basketball }}$ | 4.0 | 8.33 | Gymnastics | 16.0 | 12.0 |
| Softball | 1.2 | 2.0 | Lacrosse | 16.0 | 12.0 |
| Track and Field |  | 48.0 | Competitive Swim | 12.0 | 9.0 |
| Volleyball | 4.0 | 8.33 |  | 16.0 | 12.0 |
| (9) Univ. of Chicago |  |  | Track and Field | 12.0 | 9.0 |
| Basketball | - | 5.14 | Iowa |  |  |
| Softball | 5.0 | 8.57 |  |  |  |
| Competitive Swim | - | - | (1) Univ. of Northern Iowa |  |  |
| Tennis | - | 5.79 | Field Hockey | 6.0 | 4.0 |
| Volleyball | 3.0 | - | Softball | 4.5 | - |
|  |  |  | (2) Grand View College |  |  |
|  |  |  | Basketball | 11.43 | 8.0 |
|  |  |  | Gymnastics | 24.0 | 21.0 |
|  |  |  | Softball | 5.33 | 5.33 |
|  |  |  | Volleyball | 9.6 | 8.0 |

TABLE VIII (Continued)

| Sports | 1972-73 | 1973-74 | Sports | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Iowa (Continued) |  |  | (2) Sterling College |  |  |
| (3) Graceland College |  |  | Basketball | 6.0 | 6.67 |
| $\frac{\text { Basketball }}{\text { a }}$ | 5.0 | 4.09 | Tennis | - | 4.0 |
| Field Hockey | 5.0 | 6.75 | Volleyball | 2.8 | 2.8 |
| Softball | 5.0 | 3.6 | Kentucky |  |  |
| Tennis | 9.0 | 7.2 | (1) Eastern Kentucky Univ. 6.19 . |  |  |
| Track and Field | 14.4 | 9.0 |  |  |  |
| Volleyball | 3.6 | 3.84 | Basketball | 6.19 | 4.30 |
| (4) Iowa Wesleyan |  |  | Field Hockey | 7.36 27.0 | 5.79 31.5 |
| Basketball | 6.0 | 7.33 | Tennis | 8.0 | 5.14 |
| Field Hockey | 2.33 | 2.63 | Volleyball | 6.43 | 4.2 |
| (5) Drake Univ. |  |  | (2) Centre College |  |  |
| Basketball | 5.2 | 3.9 | Basketball | 8.0 | 7.38 |
| Gymnastics | 24.0 | 17.78 | Tennis | - | 6.4 |
| Tennis | 9.14 | 8.0 | (3) Murray State Univ. |  |  |
| Track and Field | 17.14 | 13.6 |  |  |  |
| Volleyball | 2.4 | 3.69 | Basketball |  | 9.0 |
| Kansas |  |  | Track and Field | - | - |
| (1) McPherson College |  |  | Volleyball | - | - |
| Basketball | $7 \cdot 38$ | 7.38 | (4) Univ. of Louisville |  |  |
| Softball | - | - | Basketball | 6.0 | 5.87 |
| Tennis | 9.14 | 8.0 | Field Hockey | 8.0 | 8.0 |
| Track and Field | - | 8.57 | Gymnastics | 24.0 | 24.0 |
|  |  |  | Volleyball | - | 4.92 |

TABLE VIII (Continued)


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TABLE VIII (Continued)
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## TABLE VIII (Continued)

| Sports | 1972-73 | 1973-74 | Sports |  | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minnesota |  |  | (4) Saint Cloud State College |  |  |  |
| (1) Winona State College |  |  | Badminton Basketball |  |  | -8.8 |
| $\frac{\text { (1) }}{\text { Basketball }}$ | 6.0 |  |  |  |  |  |
| Gymnastics | 6.0 | 10.29 | Diving |  | 11.25 | 27.5 |
| Softball. | 7.2 | 7.2 | Gymnastics |  | 6.0 | 16.25 |
| Competitive Swim | 10.28 | 8.0 | Softball |  | 11.25 | - |
| Tennis |  | 9.0 | Competitive Swim |  | 11.25 | 11.25 |
| Volleyball | 6.0 | 6.0 | Track and Field |  |  | 14.0 |
| (2) Southwest Minnesota State College |  |  | (5) Concordia College |  |  |  |
| Badminton | 25.2 | - |  |  |  |  |  |
| Basketball | 12.6 | 12.6 | Badminton |  | 8.0 5.63 | 5.0 |
| Diving | - | 21.0 | Field Hockey |  | 10.0 | 7.5 |
| Field Hockey | - | - |  |  | 15.0 | 6.15 |
| Competitive Swim | - | 21.0 | Tennis |  |  | 8.75 |
| Softball | 21.0 | 21.0 |  |  | - |  |
| Track and Field | - | 25.2 | Track and Field Volleyball |  | $\begin{array}{r} 14.29 \\ 9.23 \end{array}$ | $\begin{array}{r} 10.0 \\ 8.0 \end{array}$ |
| Volleyball | 12.6 | 12.6 |  | Volleyball |  |  |
| (3.) Moorhead State College |  |  | Mississippi |  |  |  |
| Badminton | 9.0 | 6.0 | (1) Mississippi College |  |  |  |
| Basketball | 9.0 | - |  | Basketball | 5.0 | 8.0 |
| Fi.eld Hockey | 10.67 | 10.67 |  | Volleyball | 5.33 | 5.33 |
| Golf | 3.0 | 4.5 | (2) Mississippi State College for Women |  |  |  |
| Tennis | 4.0 | 4.8 |  |  |  |  |  |  |
| Track and Field | 11.25 | 11.25 |  | Gymnastics | 51.2 | 10.66 |
| Volleyball | $=$ | 8.1 |  | Tennis | 51.2 24.0 | 24.0 |

TABLE VIII (Continued)


## TABLE VIII (Continued)



TABLE VIII (Continued)


## TABLE VIII (Continued)

| Sports | 1972-73 | 1973-74 | Sports |  | 1972-73 | 1973-74. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North Carolina (Continued) <br> (7) Appalachian State Univ. | (2) Dickinson State College |  |  |  |  |  |
|  |  |  |  | Basketball | 6.0 | 4.29 |
| $\frac{\text { (7) Appalachian State }}{\text { Basketball }}$ | 10.77 | 10.77 |  | Gymnastics | 36.0 | - |
| Field Hockey | 10.0 | 10.0 |  | Track and Field | 7.5 | 6.67 |
| Golf | 15.56 | 15.56 | (3) Minot State College |  |  |  |
| Gymnastics | 23.33 | 17.5 |  | Basketball | 12.31 | 7.62 |
| Competitive Swim | 10.0 | 10.0 |  | Gymnastics | 40.0 | - |
| Track and Field | 10.0 | 10.0 |  | Softball | - | 16.0 |
| Volleyball | 7.78 | 7.78 |  | Track and Field | 27.0 | 17.14 |
| (8) Univ: of North Carolina |  |  | Ohio |  |  |  |
| Basketball | 8.24 | 8.75 | (1) Baldwin-Wallace College |  |  |  |
| Field Hockey | 10.77 | 10.0 | Field Hockey 4.2 3.5 |  |  |  |
| Golf | 17.5 | 14.0 |  |  |  |  |
| Competitive Swim | 15.56 | 15.56 | Competitive Swim Tennis |  | 4.57 | - |
| Tennis | 14.0 | 14.0 |  |  | 2.33 | 3.43 |
| Voilleyball | 3.68 | 5.6 |  |  | $2 \cdot 33$ |  |
| North Dakota |  |  | (2) Ohio Wesleyan Univ. |  |  |  |
|  |  |  | $\begin{array}{cc}\text { Tennis } & 6.4 \\ \text { (3) Bowling Green State Univ. }\end{array}$ |  |  |  |
| (1) North Dakota State Univ. at Fargo |  |  | (3) Bowling Green State Univ. |  |  |  |
| Badminton | 10.0 | 20.0 |  | Basketball | - | 4.0 |
| Golf | 16.67 | 14.09 |  | Fencing | - | 6.66 |
| Gymnastics | 16.67 | 20.0 |  | Field Hockey | 6.0 | 5.14 |
| Softball | 16.67 | 12.5 |  | Golf | 18.0 | 12.0 |
| Tennis | - | 14.29 |  | Gymnastics | 25.0 | 25.0 |
| Track and Field | 11.11 | 11.11 |  | Lacrosse | - | 10.29 |
| Volleyball | 8.33 | 8.33 |  | Softball |  |  |

TABLE VIII (Continued)

| Sports | 1972-73 | 1973-74 | Sports |  | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (3) Bowling Green State Univ. (Continued) |  |  | (7) College of Mount St. Joseph |  |  |  |
| Competitive Swim | 26.66 | 26.66 |  | Basketball | 4.33 | 6.5 |
| Tennis | 6.86 | 6.0 |  | Field Hockey | - | 3.0 |
| Track and Field | 4.57 | 5.0 |  | Volleyball | 5.04 | 5.04 |
| Volleyball | - | 3.6 | Oklahoma |  |  |  |
| (4) Univ. of Dayton |  |  | (1) Oklahoma State Univ. |  |  |  |
| Basketball | 4.16 | 7.5 |  |  |  |  |
| Field Hockey | 5.0 | 8.4 |  | Basketball | 8.0 | 7.5 |
| Softball | 4.0 | - |  | Field Hockey | 5.54 | 4.8 |
| Tennis | 3.2 | 5.0 |  | Golf | 25.0 | 13.64 |
| Volleyball | 3.33 |  |  | Competitive Swim | - | 24.75 |
| (5) Univ. of Toledo |  |  |  | Tennis | 21.33 | 16.0 |
| Field Hockey | - | 8.0 |  | Track and Field | 15.0 | 20.0 |
| Softball | 7.0 | 8.0 |  | Volleyball | 5.71 | 4.21 |
| Track and Field | - | 12.0 | (2) Central State Univ. |  |  |  |
| Volleyball | 4.8 | 4.0 |  |  |  |  |
| (6) Ohio Univ. |  |  |  | Basketball | 6.0 | - |
| Basketball | - | 8.0 |  | Fencing | - | - |
| Diving | - | 9.6 |  | Field Hockey | 3.0 | 4.5 |
| Field Hockey | - | 6.66 |  | Softball | - | 12.0 |
| Golf | - | 6.0 |  | Tennis | 25.6 | 12.0 |
| Lacrosse | - | 7.5 | (3) Northwestern State College |  |  |  |
| Softball | - | 7.5 |  |  |  |  |
| Volleyball | - | 7.5 |  | Softball | 8.0 | 8.33 |
|  |  | 6.66 |  | Track and Field | - | 14.29 |
|  |  |  |  | Volleyball | 6.36 | 9.38 |

TABLE VIII (Continued)


TABLE VIII (Continued)


| Sports | 1972-73 | 1973-74 | Sports |  | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tennessee (Continued) |  |  | Texas |  |  |  |
| (2) Middle Tennessee State Univ. |  |  | (1) Stephen F. Austin State Univ. |  |  |  |
| Basketball | 7.5 | 8.0 |  | Badminton | 9.33 | 11.2 |
| Tennis | 6.0 | 3.75 |  | Basketball | 4.32 | 4.32 |
| Volleyball | 8.57 | 4.65 |  | Tennis | 24.0 | 20.0 |
| (3) Univ. of Tennessee at Chattonoga |  |  |  | Track and Field | 80.0 | 80.0 |
| Basketball | 9.33 | - | (2) W | Texas State Univ. |  |  |
| Volleyball | 4.0 | 6.0 |  | Basketball | - | 7.27 |
| (4) Memphis State Univ. |  |  |  | Bowling | - | 18.67 |
|  |  |  |  | Riflery | - | 3.0 |
| Basketball | 7.0 | 5.83 |  | Track and Field | - | 19.2 |
| Track and Field | 26.67 | 26.67 |  | Volleyball | - | 5.4 |
| Tennis | 11.0 | 11.0 | (3) Texas Christian Univ. |  |  |  |
| Volleyball | 3.27 | 5.45 |  | Diving | - | 8.0 |
| (5) Milligan College |  |  |  | Fencing | 24.0 | 24.0 |
| $\frac{\text { Sasketball }}{\text { S }}$ | 0.86 | 0.86 |  |  | 10.67 | 10.67 |
| Softball | 0.75 | 0.60 |  | Riftery | 32.0 | 32.0 |
| Tennis | 0.86 | 0.84 |  | Competitive Swim | - | 5.0 |
| Volleyball | 1.13 | 0.96 |  | Tennis | - | 3.69 |
| (6) Univ. of Tennessee |  |  | (4) Lamar Univ. |  |  |  |
| (6) ${ }_{\text {a }}$ | 18.33 | $\begin{array}{r} 15.71 \\ 4.36 \end{array}$ |  | Badminton | 8.0 | - |
| Volleyball |  |  |  | Basketball | 18.18 | 16.67 |
|  |  |  |  | Softball | 4.27 | 4.0 |
|  |  |  |  | Competitive Swim | 6.4 | - |
|  |  |  |  | Tennis | - | 36.0 |
|  |  |  |  | Track and Field | 6.0 | 3.75 |
|  |  |  |  | Volleyball | 7.11 | 6.4 |

## TABLE VIII (Continued)



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TABLE VIII (Continued)
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| Sports | 1972-73 | 1973-74 | Sports |  | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Virginia (Continued) |  |  | (3) Marshall Univ. |  |  |  |
| (4) Bridgewater College |  |  |  | Badminton | 30.0 | 20.0 |
|  |  |  |  | Basketball | 8.4 | 7.64 |
| Basketball Field Hockey | 10.0 | 10.67 |  | Competitive Swim | - | 24.0 |
| Field Hockey | 6.67 | 6.67 |  | Volleyball | 14.0 | 14.0 |
| Tennis | 7.27 | 10.0 | (4) Roanoke College |  |  |  |
| (5) Western Mennonite College |  |  |  | Basketball | 6.88 | 7.8 |
|  |  |  | Diving |  | - | - |
| Basketball | 7.5 | 7.5 |  | Field Hockey | 7.86 | 7.86 |
| Volleyball | 3.75 | 3.75 |  | Golf | 7.0 | 6.86 |
| (6) Virginia State College |  |  |  | Lacrosse | 6.0 | 6.0 |
| Basketball | - | 8.0 |  | Competitive Swim | - | - |
| Track and Field | - | 12.0 |  | Volleyball | - | 6.67 |
| Washington, D.C. |  |  | Wisconsin |  |  |  |
| (1) Federal City College |  |  | (1) Univ. of Wisconsin |  |  |  |
| Basketball | 15.65 | 9.6 |  | Badminton | - | 11.25 |
| Tennis | 5.0 | - |  | Basketball | - | 9.6 |
| Volleyball | - | 6.0 |  | Gymnastics | - | 14.29 |
| West Virginia |  |  |  | Tennis | - | 6.0 |
|  |  |  |  | Track and Field | - | 10.5 |
| (1) West Virginia Univ. |  |  |  | Volleyball | - | 6.93 |
| Básketball | - | 9.6 |  |  |  |  |
| Gymnastics | - | 39.0 |  |  |  |  |
| (2) West Virginia State College |  |  |  |  |  |  |
| Field Hockey | 12.0 | 12.86 |  |  |  |  |
| Tennis | 9.0 | 9.0 |  |  |  |  |

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TABLE VIII (Continued)
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| Sports | 1972-73 | 1973-74 | Sports |  | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wisconsin (Continued) |  |  |  |  |  |  |
| (2) Univ. of Wisconsin \# 2 |  |  | (4) Univ. of Wisconsin at Silfer Falls (Continued) |  |  |  |
| Badminton | 12.0 | 12.0 |  | Competitive Swim | 10.88 | 10.88 |
| Basketball | - | 10.0 |  | Tennis | - | 10.0 |
| Diving | 25.0 | 25.0 |  | Track and Field | 7.0 | 7.0 |
| Fencing | 25.0 | 20.83 |  | Volleyball | 7.0 | 7.0 |
| Field Hockey | - | 13.75 | (5) Univ. of Wisconsin at Stevens Point |  |  |  |
| Golf | - | 24.0 |  |  |  |  |
| Gymnastics | 33.33 | 28.75 |  | Field Hockey | 4.0 4.62 | 4.8 5.54 |
| Squash | 34.5 | 34.5 |  | Gymnastics | 4.62 5.0 | 5.54 5.5 |
| Competitive Swim | 25.0 | 25.0 |  | Softball | - | $5 \cdot 5$ |
| Tennis | 14.0 | 15.4 |  | Competitive Swim | 7.5 | 9.0 |
| Track and Field | 10.66 | 34.38 |  | Tennis | 5.25 | 6.0 |
| Volleyball | - | 11.79 |  | Track and Field | 6.0 | 9.6 |
| Crew | - | 69.0 |  | Volleyball | 6.0 | 7.2 |
| (3) Univ. of Wisconsin \#3 |  |  | (6) Univ. of Wisconsin at Menomonie |  |  |  |
| Gymnastics | 20.0 | 20.0 | (6) | Basketball | 1.71 | - |
| Tennis | 8.88 | 8.88 |  | Gymnastics | 2.22 | 4.44 |
| Track and Field | 16.0 | 13.85 |  | Competitive Swim | 2.0 | 4.0 |
| (4) Univ. of Wisconsin at Silver Falls |  |  |  | Track and Field | 0.66 | 7.5 |
| Basketball | 7.7 | 10.0 |  | Volleyball | 2.14 | 3.0 |
| Field Hockey | 8.27 | 10.11 |  |  | . |  |
| Gymnastics | 43.33 | 18.57 |  |  |  |  |

TABLE VIII (Continued)

| Sports | 1972-73 | 1973-74 | Sports | 1972-73 | 1973-74 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Wyoming |  |  |  |  |  |
| Univ. of Wyoming |  |  |  |  |  |
| Basketball | - | 6.66 |  |  |  |
| Diving | - | 11.43 |  |  |  |
| Field Hockey | - | 16.0 |  |  |  |
| Softball | - | 13.33 |  |  |  |
| Track and Field | - | 20.0 |  |  |  |
| Competitive Swim | - | 11.43 |  |  |  |
| Minimum Number of Contests per School: |  |  |  |  |  |
| Volleyball | 10 |  | Fencing | 5 |  |
| Basketball | 10 |  | Crew | 4 |  |
| Golf | 5 |  | Water Polo | 4 |  |
| Track and Field | 4 |  | Archery | 5 |  |
| Competitive Swimming | 6 |  | Cross Country | 5 |  |
| Field Hockey | 5 |  | Lacrosse | 5 |  |
| Badminton | 4 |  | Synchronized Swimming | 4 |  |
| Gymnastics | 5 |  | Skiing | 5 |  |
| Softball | 6 |  | Soccer | 4 |  |
| Tennis | 7 |  | Bowling | 5 |  |
| Diving | 5 |  |  |  |  |

The data concerning the variation of sports within the United States showed which sports are ranked from one to five in popularity in the United States. The data showed how many contests were played in each sport, which in turn, showed which sports were more dominant. By examining the regional and national participation maps, one can conclude which states are leading in what sports, and also which states participate most frequently in these tournaments. One can also see that the schools which spent the most hours in practice per contest were most often the national winners. There has also been an increase in practice hours from 1972-74. The national winner map (Figure 3) shows the states that have won in various sports from 1971-76. Budget data per student shows the amount of money allocated for women's athletics.

## CHAPTER V

CASE STUDIES ON NATIONAL AIAW WINNERS

Many questions have been asked about institutions like UCLA, Los Angeles, California, and Immaculata, Pennsylvania. What makes them winners? Is there a package for success? And if so, how can it be implemented?

To find these answers one must look to the numerous winners. $A$ questionnaire (Appendix B) was sent out April 16, 1975, to the top three or four colleges in each of the seven AIAW National Sports. A follow up letter was mailed on June 1 , 1975, to all schools who had not yet responded. The schools were selected on the basis of AIAW National Results from 1972-76. The questions were designed to discover why schools were successful in the seven AIAW National sports: (1) basketball; (2) Volleyball; (3) Gymnastics; (4) Track and Field; (5) Badminton; (6) Swimming; and (7) Golf. The two sports added to AIAW in 1975-76, softball and field hockey, are not included in the study.

## The Basketball Elite

Although most people have not heard of Immaculata College, it is the capital of women's intercollegiate basketball. They were the National AIAW winners in 1972, 1973, 1974, and placed 2nd in 1975 and 1976. Women's leagues in Philadelphia area have always had a long and distinguished history despite the fact that, until 1971, women's basketball
had used six players, and had poor coaching. In 1970, Cathy Rush, a basketball coach, began coaching at Immaculata at a salary of only \%500.00 per year. Before Cathy Rush, Immaculata was no better than anyone else. Rush has shown that a high caliber team can be developed through hard work and love of the game.

Rush had some of the best Catholic League women basketball
players from the Philadelphia area. They had been under pressure to win in the high school leagues where anyone who came out for the team made it. However, Rush decided to work her players two practices a day under game conditions, with men's rules after 1971. This strategy produced one of the best teams in the nation.

The second year, Rush expanded the basketball schedule to include over 20 games, and all were played on the road against the stiffest competition possible. Immaculata ended the season with a 24 and 1 record and the National Basketball title, thus shocking the Midwestern and Southern teams who had dominated the sport for decades. Neither the school nor the press knew what to think. Here was a team with no uniforms, shoes or equipment. There is no recruiting at Immaculata, nothing that even resembles a big time athletic budget (about $\$ 2,000$ overall was spent for publicity and traveling expenses, with the sum of $\$ 5$ to $\$ 7$ per day meal plan, and no immediate plan to begin dispensing athletic scholarships). But they knew the game of basketball. The year of 1974-74, two players shared a $\$ 1,000$ grant=in-aid, but suthorities said that was provided primarily because of their academic potential and financial need.

Presently Cathy Rush has found herself in a buyer's market. Immaculata has such a reputation that everyone wants to go there to
play. Over 30 per cent of the applicants listed basketball as their reason for choosing Immaculata.

However, as far as the school administration's reaction to the "Mighty Macs" of Immaculata, it would rather have the students make the dean's list than win the national title. Rush views, uneasily, the coming change in women's basketball, whether the teams that are going to win are going to be the rich ones. With little money and with the administration's philosophy, will they survive?

Because of Immaculata's success, one sees the interest in basketball diffusing to all areas of the state. The University of Pittsburgh said they wanted to win and will do what has to be done to win. Pittsburgh, in 1974, was offering women's athletics $\$ 130,000$ in scholarships and other monies. Temple University, in 1974, was offering 24 athletic scholarships. In 1974, Penn State was offering $\$ 40,000$ in scholarships to entice the best women competitors. Immaculata has only gate receipts by which to finance its program, although they are now running in the thousands of dollars.

Saluska, the athletic director, said that Immaculata also had teams in field hockey, swimming, tennis, and volleyball, although, more emphasis was placed on basketball due to widespread interest in the sport.

The factors that have led Immaculata to the national basketball titles are many. Facilities, support, equipment, and excellent coach, quality players, a winning record, and a supportive geographical area all play an important role. The Catholic high schools in the Philadelphia area promote basketball more than any other sport from fall to spring as well as in the summer league. The women are very
experienced players by the time they reach college. Immaculata may eventually be lost in the shuffle; but, for the time being, they are still the Queens of the basketball court.

Delta State, Cleveland, Mississippi

Delta State College at Cleveland, Mississippi, with a student enrollment of 3,200 had basketball for only two years before taking the AIAW National Basketball title in 1975 and 1976. The assets that led them to be national winners in such a short time began with 10 outstanding players who were dedicated to the game and wanted to win. Margaret Wade, the athletic director, and a male assistant, coached the team to victory.

Delta State started with no scholarships except those that all students are eligible for; but, scholarships have been made available to their athletes. Emphasis was on basketball at Delta State because of the support of players, students, faculty, and townspeople. This great interest and support grew out of a tradition of strong high school basketball in the Northern part of Mississippi. Many have referred to this area as "women's basketball country." Recruiting has been no problem, and the enthusiasm had remains high. Delta's. budget, however, was limited. Only badminton and basketball were available for female students because there were only four women in the physical education department, and there was no tine or money available for coaching.

Delta State had a record of $28-0$ before their win at the National AIAW tournament in 1975. Coach Wade said they, "Had an excellent ball club who got better with each tournament and really peaked at the

National AIAW Tournament at Madison Square Garden."
The success of Delta State has mainly been attributed to Lucy Harris, who played in the 1975 Pan American Games (Gold Medalist), and in the 1976 Olympic games (Silver Medalist). She averaged 19.6 points for 18 games as a freshman, 25.3 points for 28 games as a sophomore, 32.2 points in 34 games as a junior. Lucy rebounded awesomely well--1, 166 rebounds during her first three years, giving her a 14.6 average for the 80 games.

## California State University at

## Fullerton, California

California State University at Fullerton, California, is located in a large suburb of Los Angeles (population 86,000) with a student enrollment of 13,000. They took third in the 1975 AIAW National Basketball Tournament and placed in 1972-73 and 1974. The factors in their success were a combination of emphasis on the program, reputation of the program (which attracts most of the top players in the area), the players, ability, and the coaching. California State University at Fullerton offered scholarships and operates on a budget of $\$ 4,000$ for basketball.

After looking at the three basketball elite schools, one cannot point to a single factor which will uniformly produce success.

Golf

Arizona State University at Tempe, Arizona

Arizona State University, with a student body of around 30,000 had one of the best intercollegiate programs in the United States in
1974. The program started approximately 15 years ago and has had numerous successes. Arizona State placed 2nd in the AIAW National Tournament in 1971, sixth in 1972, 3rd in 1973 and 4th in 1974. Dorothy Deach, Athletic Director, said that the success of the program is due to the coaches, interest and dedication, considerable encouragement by students, and the fact that a winning program always attracts other athletes. Scholarships were offered in 1974-75 on a very limited scale, usually two or three per sport. The amount of money allocated each of their eight sports depended on travel, team size, and competition.

The geographical location is definitely a plus factor for gold in Arizona, providing a year-round opportunity for practice and play. Players who wish to participate in golf are naturally drawn to this type of climate.

## Furman University, Greenville, South Carolina

Furman University at Greenville, South Carolina, enrolled approximately 2,000 students, half of them were women. The University took eighth in 1973 and third in 1974 to become National winners in golf.

Golf started at Furman in 1969 on a very informal basis. It started through the interest of a student who organized a golf team. In 1971 a coach was hired who knew golf and golfers, so the program grew.

The budget was able to support the team, but if they had to offer scholarships, then it would suffer. The response indicated that scholarships would not likely be offered as the women just wanted to play golf, and that was the most valuable asset.

The typical Furman woman student was more interested in individual and dual sports than in team sports. They have good teams in all sports, but in 1974 they were first in the state in tennis, gymnastics and golf. They took second in the state weimming competition and seem to be average in field hockey, but very weak in basketball. In all, 'six intercollegiate teams were available, each receiving equal shares of everything. Ruth Reid, the athletic director, felt that scholarship money had been an important element in basketball and may become a factor in tennis.

Many of their students came from areas which play golf, and many girls have had work under club pros. The University has an 18-hole course in which the back nine holes are of tournament quality. Since the climate lends itself to an all-year golf program, there seems to be a great deal of interest in golf both on campus and in the area. Of course, Furman's reputation as a national winner, as well as publicity in golf magazines, has been a great factor in drawing top golfers.

Reid, the athletic director, stated "I cannot point to a single reason for our success. We did not start out to build a golf dynasty as I understand has been true in some colleges in some sports. We have tried all along to offer a program for the Furman Woman, not develop a program and bring in students to fill the program. Even though the odds seem to be against us, I hope that we can continue with the philosophy."

## Rollins College, Winter Park, Florida

Rollins College in Winter Park, Florida, took second in 1973 and in 1974 took the number one position in the AIAW National Play-Offs in Golf. Rollins is a small private school of 1,325 students, with less than half of them women.

Golf started at Rollins in the early 30's. National success has resulted from the many opportunities offered their golfers, such as money, interest, emphasis, and reputation. Their response indicated that: (1) the budget provided seemed adequate to meet their needs; (2) having playing privileges at several of the surrounding golf courses kept the cost down; (3) two girls were on partial gold scholarships for the 1974-75 school year; (4) the climate and location was undoubtedly a big contributing factor to all-year-round play; and (5) they also fielded intercollegiate teams in golf, tennis, crew, waterskiing, basketball, but more emphasis was placed on golf and tennis.

Florida State University, Tallahassee, Florida

Florida State University took second in the 1972 AIAW Golf National tournament. FSU, in Tallahassee, supported an enrollment of 20,000 students in 1974. The golf program started in 1965. Being a national winner was not due to coaches, money, emphasis, or scholarships, as they had none to offer. 1974 was the first year for a fulltime coach, and in 1975 scholarships were offered. The players, with their individual motivation, came to FSU because of outstanding academic programs and, incidentally, continued their golf interest.

The location and climate of Florida definitely palys a role in attracting golfers, not only because of the year-round warm weather, but also the availability of some of the best golf courses in the United States.

Marlene Furnell, the athletic director, believed that offering scholarships in the future will help draw the top golfers, but the monies really came too late in 1974 to get the more outstanding athletes.

The school sponsored eight intercollegiate sports, each funded equally.

## Gymnastics

## Southern Illinois University, Carbondale, Illinois

Southern Illinois University at Carbondale, Illinois, started varsity gymnastics for women in 1964. The student enrollment was around 19,000 in 1974 with less than half being women. The SIU gymnastics team took third in 1972, second in 1973, and finally progressed to the National AIAW title in 1974 and 1975, but dropped to fourth place in the 1976 tournament.

In addition to several national invitational championships, Southern Illinois University has won three AIAW National titles. Charlotte West, the athletic director, believed the factors that have led to their national success have been a long history of support for women's athletics, and a reputation which has continued to bring outstanding performers to their campus. They have funded the program well, and the coach is well-known in gymnastics circles. In addition, the community has given good support to the program.

SIU offered 11 varsity sports for women. The program did not place more emphasis on gymnastics, although it did receive more money merely because it cost more to send the women greater distances to find suitable competition.

Some of the gymnasts were on scholarships. The location is a factor in that SIU has a very attractive arena in which the girls not only practice but compete. The high schools within the area place a lot of emphasis on gymnastics, so local colleges have good high school graduates.

West stated, "I believe that once a school wins a National event and receives good publicity, this tends to attract girls who are interested in participation on a national team. The entire procedure reflects a 'rich get richer' cycle."

## Indiana State University, Terre Haute,

## Indiana

Indiana State University, whose women athletes were directed by Alpha Cleary, placed second in 1971, fifth in 1972, and third in 1973 in the Gymnastics AIAW National Competition. The program began in 1963 due to availability of coaches, money, players, and interest.

Fourteen women's intercollegiate sports were offered: softball, bowling, badminton, swimming, and track, as well as gymnastics, were among the leaders. Some of the Symnasts were on scholarships and they operated on an $\$ 8,000$ budget. The program placed equal emphasis on different sports but expends more money for gymnastics, due to the fact they traveled further than other sports.

The reputation of gymnastics possibly has led the better competitors to ISU. The location is a factor in that Indiana and Illinois both are areas with strong interest in gymnastics. Since they are neighboring states, the area plays a factor in the gymnastics enthusiasm.

## Track and Field

## Texas Women's University, Denton, Texas

Texas Women's University, with 1,500 women, has always had a strong Women's Intercollegiate Program. They took first in 1972, second in 1973, thrid in 1974, and third in 1975 in the Women's track and field national meet.

Track and field began in 1967 at TWU. Their success came from hard work, good competitive schedule, adequate financial support, coaching, and facilities. Its reputation, as always, led the better performers to TWU. They had previously not been on scholarships, but a limited number were offered in 1974-75.

The budget was adequate for track and field. Bert Lyle, coach, believed that the climate has an important role due to the all-year training and nice weather.

## University of California, Los Angeles,

## California

University of California at Los Angeles could be considered to have the top athletic program for women in the United States. With an enrollment of 32,000 students from which to select, plus the

University's winning tradition, athletes are a "dime a dozen."
UCLA took second in 1974, first in 1975 and fifth in 1976 in the National AIAW Track and Field tournament. The track and field program started around 1965 with the presence of fine athletes, enabling UCLA to achieve national standing.

Loy Green (Sport Information Office) believed that Southern California supported track and field events because of their outdoor nature. The favorably year-round climate enabled athletes to work out and compete in their sport throughout the year.

The reputation as a good track school was just beginning to draw other good track athletes to UCLA. Many of the athletes were on some type of scholarships, but Green felt at this time that this had not been a factor in success. They had given scholarships to several of the athletes already attending the school. As of date they will have had athletes who were enticed by scholarships, which should have an upgrading effect on their program.

Concerning budget, surprisingly, they spent more money on basketball than on any other sport, with track only a close second. This was partly due to emphasis, but more because of the nature of the sports. Because of equipment, number of players, track and basketball teams were more costly than others. The third highest"budget went to swimming, with volleyball fourth and golf as eighth. UCLA had a well-rounded intercollegiate program with 11 sports being offered for women.

## Badminton

Arizona State University, Tempe, Arizona

Arizona State University, whose program has been mentioned before, also has been third in 1970, first in 1971 , second in 1972 , third in 1973, sixth in 1974, and first in the 1975 and 1976 AIAW National Badminton Championships. Again, the individual sports seemed to dominate in this region area. The climate was a big factor in that students are exposed at a very early age to backyard badminton in the community and with the family. The other information concerning budget, scholarships, and reasons for success were the same as those previously mentioned for golf.

## California State University,

## Long Beach, California

California State University at Long Beach, enrolled 29,000 students in 1974. Badminton started as a co-educational intercollegiate sport in $1964-65$, to later produce AIAW National Winners with a first place in 1970, second in 1971, third in 1972, first in 1974, second in 1975, and third in 1976. The factors that have led to their success were: (1) coaches' interest; (2) players with talent in the locale; (3) the strength of women's physical education majors program; and (4) the strength of other academic majors at the university. CSU currently offers 10 sports, being national winners also in volleyball, gymnastics and basketball.

As in other places with warm climates, the location of CSU had a great deal to do with badminton. But in addition, CSU is near Los Angeles, California, one of the few areas where club badminton is strong in the United States. As a result, young players had an opportunity to participate in age-group programs at junior and senior high school age levels. They also had an opportunity on a regular basis to see outstanding nationally-ranked adult players.

Frances Schaafsm, the athletic director, said that the reputation of the badminton program attracted strong players. However, they have had a policy of no recruiting for many years, so the strength of the program was due to other factors. The budget for badminton was over $\$ 3,000$ in 1974 , and all sports were considered equally in relation to funding.

## University of Wisconsin, LaCrosse, Wisconsin

The University of Wisconsin at LaCrosse, Wisconsin, wnrolled approximately 7,500 students for the academic year 1974-75. They have taken third place in 1974 and 1975 and fourth place in 1976 in the AIAW National Badminton Tournament. The program of badminton, started 20 years ago, has progressed every year.

The entire program included 11 intercollegiate sports for women. The emphasis was fairly equal for all sports with none being highlighted. No scholarships had been offered, the reputation of the school has influenced better players to come to the University, and the badminton budget operated on $\$ 1,300$ per season. Martine Stephens, badminton coach, believed that hard work, good coaching, good players, and Wisconsin's being a leading physical education school, had all
contributed to the program's success.

Pasadena City College, Pasedena, California

Pasadena City College in Pasadena, California, with a large enrollment of 18,000 , took first place in the AIAW National Tournament in 1973, but since have not been reslly successful in the top ranks.

The budget of $\$ 600$, with no scholarships, and with a program of 10 sports, made it hard to emphasize one sport for national competition. The players seemed to come from outside groups in the area. The climate again encourages more outdoor time, which in turn led to better badminton players.

Volleyball

## University of California, Los Angeles,

## California

The University of California at Los Angeles, previously mentioned in track and field, and golf, started volleyball in 1966. In 1972 they took third in the AIAW Volleyball Championships, in 1974 took four th and in 1975 placed first. The background information regarding the place of volleyball in the program was the same as previously discussed

In the case of volleyball, it was endigenous to Southern California. The nucleus of the team was straight off the local beaches where the sport was unbelievably popular.

## Texas Women's University, Denton, Texas

TWU at Denton, Texas, also previously mentioned with track and field, were national winners in 1974, second place in 1973, and sixth in 1975 in volleyball. Volleyball began in 1970 and has had quality teams ever since.

## University of California,

Santa Barbara, California

University of California at Santa Barbara, with a student body of 12,000 in 1974 , offered seven intercollegiate sports for women and others sports as club activities. The volleyball team took fifth in 1972, and third in 1973,1974 , and 1975 in the National AIAW National meet.

Volleyball began at UCSB in 1966. The reasons for their success were: (1) coaches; (2) talented players; (3) location; (4) academic reputation; and (5) climate. Bobbie Parrish, the athletic director, believed that their successful program grew from recognition and support. Student support brought popularity and financial backing which started the action and, in turn, attracted others to the program.

None of the players were on any form of athletic scholarships. Some possibly were receiving grants or loans, based on need and/or academic scholarships. The budget for volleyball in 1974-75 was over $\$ 7,000$, with equal money for all sports.

The beautiful location and climate did contribute to their program. They are on a seashore bounded on two sides by the Pacific Ocean and the scenic Santa Ynez mountains. The campus consisted of 850 acres for students. Beach volleyball was excellent training and the women
could participate all year round. They also have good U.S.V.B.A. teams, and the new pro-league teams were all over Southern California. Such interest obviously helped to promote the sport.

Swimming

Arizona State University, Tempe, Arizona

Arizona State University took first in the National AIAW Swimming meet in 1972, 1973, 1974, second in 1975 and fifth in 1976. The material concerning elements contributing to their success have already been mentioned when reviewing track and field, golf and volleyball.

University of Florida, Gainsville, Florida

The University of Florida, at Gainsville enrolled 25,000 students in 1974. The swimming program first began during the 1972-73 academic school year. Its success had been due to the interest in the program by women's athletics, and helped by their achieving official status as a team. These elements brought financial support, better coaches, and players to the University of Florida.

They offered eight sports, in which at some time they have been national champions in five. In 1973 they took second and in 1974 eighth in the AIAW National Swim Tournament. Ruth Alexander, chairman of physical education department, suggested that everyone in the north wants to come to Florida to swim because of the beaches and access to water. They offered several scholarships, $\$ 15,000$ for swimming, with equal emphasis on all sports.

## University of Miami, Coral Gables, Florida

The University of Miami, Coral Gables, Florida, took second in 1974 and first place in 1975 and 1976 to capture the National AIAW title in swimming. The school had an enrollment of around 18,000 students in 1974. The women's intercollegiate swim team had been officially recognized only in 1973. Prior to that time, the swimming team did not even exist.

The most important items in their quick success have been scholarships, facilities, and coaches. Although swimming and diving are the only sports in which they had won a national title, both the golf and tennis teams have in the past done well in nationals. The location had definitely been important due to the warm climate for swimming, golf and tennis.

Scholarships were offered to 12 members of the swimming and diving team, while eight members of the golf team received scholarships. The budget was approximately $\$ 10,000$ for swimming and $\$ 6,000$ for golf in 1974-75. The entire program offered six sports. The swimming and diving program, by virtue of the facilities and coaches available, as well as its ability to attract outstanding swimmers, had been high on their priority list, but not to the exclusion of other sports.

The University's recognition of the importance of the Women's Intercollegiate Athletic program and a subsequent authorization to award 15 tuition-waiver scholarships during the 1973-74 academic year, was the impetus that thrust the Women's Athletic Program into national prominence. The University had taken, and continues to take, the position that they will be a leader in Women's Intercollegiate

Athletics and not a forced follower. The University of Miami may be unique in the opportunities available for swimming, golf and tennis by virtue of the excellent manmade facilities available, as well as the beautiful God-given climate which is so necessary to the sports.

Towards Exploration

After reviewing the various National Winners individually, one cannot point to a single factor which will uniformly produce success. Instead it is a multi-factor combination of: (1) consistently good program; (2) facilities; (3) money; (4) coaches; (5) administrative support; (6) location; (7) climate; (8) strong physical education department; (9) reputation; (10) scholarships; (11) competitive schedule; (12) adequate public support; (13) quality players; (14) academic strengths; (15) size of school.

All, or some of the above, have led most schools to success. With the passage of Title IX, many more schools are offering scholarships. The national winners could drastically change. Some schools, such as Immaculata College, with limited budgets will be offering only one or two sports at the national competitive level. Whereas larger schools with ample money, as Arizona State University and University of California at Los Angeles, will continue to offer a diverse program for women.

Geographically, the areas in the United States that have water and warm weather attract swimming, golf, volleyball, track and field, and badminton. In the colder or all-season climates one sees basketball, gymnastics and badminton. The states of California, Arizona, Texas,

Florida, Pennsylvania, Massachusetts, Illinois and Indiana have been the leading national winner states.

The two best all-around programs in the United States were at Arizona State University and the University of California at Los Angeles. Both offer the largest number of sports, and at the same time they are national winners in over half of the sports.

Although presently many factors have related to a schools' success, it looks as though the time is coming when two aspects will stand out: money and location. The schools that presently have the larger budgets for women's athletics were the national winners. With money, a school can recruit top notch players from the United States, and money will provide quality coaches. At the present time, over half of the colleges were offering scholarships to athletes, and it was increasing everyday. The question now is who can offer the quality athlete the most money! The time will come very soon, that without scholarships one will not stand a chance in competition, whether it be at the local, state or national levels. The location and climate will help many schools. Certain sports were suited best for certain climates. Also, where an area encourages a sport from elementary school to high school, so in turn it will supply quality athletes for that area.

Concerning the colleges and universities who presently have little money, and no reputation as a winner in a sport, the question is, will they survive in today's growing women's athletic world?

To Whom It May Concern:
I am presently doing a study for my dissertation on a questionnaire that was sent out to all AIAW member schools in 1973.74. To add to the geographical nature of the study and sport, $I$ am planning to add several case studies of various schools who have been national contenders in specific sports. The information that I am looking for is:

1. When did basketball start at your school?
2. What factors have led you to become national winners? Such as coaches, money, emphasis, players, interest, scholarships.
3. Why do you feel that you have been national winners in basketball, and not other sports?
4. Do you feel that location and climate have anything to so with the sport?
5. Do you feel that the reputation of basketball at your school has led the better players to come to your institution?
6. Are your team basketball players on scholarships?
7. What type of budget does basketball alone have to operate on?
8. How many Women's Intercollegiate Sports do you offer?

Do you place more emphasis and money on basketball in your sports program than other sports?

I am looking for information from you on basketball so that other schools might be able to relate to your success and why. It will definitely add a personal touch to my study and give credit to your successful intercollegiate program.

I realize that this is a very time consuming task to ask of you. But I feel this would be the only way to receive the information since I will be unable to make personal interviews.

Thank you so much for your time and trouble. It will be greatly appreciated.

> Sincerely,

Joann Rutherford

## CHAPTER VI

## CONCLUSIONS AND RECOMMENDATIONS

## Conclusions

This research has been conducted to add to the body of knowledge concerning women's intercollegiate athletics. It was proposed that variations in the number of sports, contests per sport, degree of participation, national winners, budget data and scholarships are definitie factors in the quality of women's intercollegiate athletic programs throughout the United States.

1. The data concerning participation patterns in sports and number of sports offered per state demonstrated the following: The largest number of sports offered in any state was 15. Five were team sports and 10 were individual sports. The states reporting 15 were Virginia, Texas, California, and Pennsylvania. There were 22 different women's intercollegiate sports in the United States, seven were team sports and 15 individual sports.
2. The study analyzed sports in terms of the number of contests played, which in turn, provided clues as to which sports were taken most seriously. For example, the basketball data showed that Tennessee played 17.5 contets, Mississippi, 24 contests, and Texas, 19.7 contests. These are the states that are representative in the national basketball tournament.
3. The data concerning the variation of sports within the United States demonstrated which sports were prevalent in the various states. It also documented the sports popularity. To mention only the most important sports, basketball was in the top five in 50 states except Florida and ranked first in well over half of the United States. Volleyball was played in 44 states and ranks second in a third of the states. Field hockey was played in almost every eastern and northwestern state. Softball is in 33 per cent of the states with more emphasis in the central area of the United States.
4. The regional and national participation maps pointed out the leading tournament states, Arizona, California, Texas, and Pennsylvania. One can conclude that the schools that spent the most hours of practice per contest (Massachusetts put in 42 hours per gymnastic contest and Tennessee put in 15 hours per contest in basketball) were associated with national tournament representation. Generally speaking there has been a definite increase in practice hours from 1972-1974.
5. The national winner map depicts the states that have won national honors in various sports from 1973-1975. For example, Arizona in golf and swimming, Pennsylvania in basketball, California and Texas in volleyball.
6. Budget data per student showed the amount of money allotted for women's athletics. The data revealed that the money per women student ranged from a high of $\$ 28.57$ in 1973-74, to a low of $\$ 0.43$, in $1974-75$ a high of $\$ 4.86$ with a low of $\$ 0.38$.

The money per sport for each woman was a high of $\$ 7.14$ with a low of $\$ 0.04$ in $1974-75$. It was highly suggestive that the money allotted for women's athletics was unjustly low. However an explosive growth of funding from 1972-1974 was apparent.
7. As far as scholarships are concerned, the Northeast offers the most. Nationally, there was a definite increase in scholarship subsidies from 1973-1976.

The geographical variations that exist for intercollegiate athletics in the United States are very difficult to explain. The growth and success of various intercollegiate programs has been due to a multivariate combination, including: (l) consistently good programs; (2) facilities; (3) money; (4) coaches; (5) administrative support; (6) location; (7) climate; (8) strong physical education department; (9) reputation; (10) scholarships; (11) competitive schedule, (12) public support; (13) quality players; (14) academic strengths; and (15) school size.

## Recommendations

The above conclusions are based on the response from 57 per cent of the AIAW member institutions in 1973. The results of this study are representative of the trends among all AIAW member schools.

The opportunities for future geographic research in the area of women's athletics are limitless. One possible research focus involves an in-depth analysis of the variables examined in this study. Continuous up-dating must be employed with this type of study. With the rapid growth of women's athletics, the current spatial patterns are in a state of flux. In several years it would be interesting to
conduct a comparison. Given that Title IX has stated that colleges and universities must meet the specifications for women's athletics by 1978 , one should see rapid growth from 1976 to 1978 in all women's athletic programs.

A study which would examine the origins of women Olympic players (schools and areas) and compare that with the national AIAW winner schools in specific sports would be quite useful.

A study which should be undertaken as a supplement of the present research is an examination of patterns of success, to be carried out after a three to five year hiatus. A simple comparison of present and future patterns of success will indicate much about the dynamics of individual programs and trends within the women's intercollegiate athletics.

Another study which would provide meaningful results is an examination of the role of program, institution, and regional factors in explaining men's athletic programs. If an analysis were compiled from earliest beginnings to present day, then a comparative summation could be offered between men's and women's achievement programs. By comparing results of such a study with present findings, a better basis for understanding the present pattern of women's athletic quality and needs could be shown.

Still, another study could examine the relationships between high school programs and college programs. Iowa women's high school basketball is one of the strongest in the country, but the colleges in Iowa have not yet emphasized basketball.

If we are to avoid the national recruitment of athletes which prevail in men's programs, than a college region program should be
tuned to its high school programs. Hence, I would recommend a comparison study on high school sport. A study of the present recruiting scene is of immediate importance.

An analysis of geographic recruiting patterns analogous to the socio-geographic research of Rooney would be helpful on recruiting college athletics. Personal experience has demonstrated a subtle move toward regional and national recruiting programs. This is the time when research needs to be done on movement patterns of women athletes.

The author believes that the above recommendations are only a few suggestions for further study. The area of research in regard to women's sport is unlimited, and with the current growth and upgrading of women's athletics, more research is definitely needed.

The future of intercollegiate women's sports looks promising. Enthusiasm on the part of women participants and the professional teacher-coaches is high. By working toward some balance in the opportunities for men and women to compete in sports it is possible to achieve a more wholesome, democratic balance in all phases of athletics. Therefore, it is of paramount important to examine various aspects of Women's Intercollegiate Athletics so that colleges and universities will have definitive factual information to use in making decisions regarding future Intercollegiate Athletic Programs.

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APPENDIXES

APPENDIX A

RESPONDING PROGRAMS AS DISPLAYED IN FIGURE 1

Alabama
A. University of Montevalls
B. University of Alabama
C. Florence State University

Arizona
A. Arizona State University
B. Phoenix College

Arkansas
A. University of Arkansas
B. Arkansas Polytechnic College

California
A. California State University - San Diego
B. Stanford University
C. California State University - Long Beach
D. California State University - Los Angeles
E. University of California - LaJolla
F. University of Santa Clara
G. University of California - Riverside
H. California Lutheran College
I. California State University - Fullerton
J. Occidental California
K. University of California - Irvine
L. California State College-Chica
M. University of California - Berkley
N. California State College - Rohnert Park
O. Whittier College
P. California State College - Stanislaus

Colorado
A. Colorado Women's College
B. Southern Colorado State College

Connecticut
A. Bridgeport
B. West Connecticut State College

Delaware
A. University of Delaware

Florida
A. Florida Int. University
B. University of South Florida
C. University of Florida

Georgia
A. Shorter College
B. North Georgia College
C. University of Georgia
D. Columbus College
E. Athens College
F. West Georgia College
G. Fort Valley State College

Hawaii
A. University of Hawaii

Idaho
A. Idaho State University - Pocatello
B. College of Idaho - Caldwell

Illinois
A. Southern Illinois University - Carbondale
B. Northern Illinois University
C. Southern Illinois University - Edwardsville
D. Greenville College
E. North Central College
F. Rockford College
G. University of Illinois
H. Chicago State University
I. University of Chicago

Indiana
A. Butler State University
B. Franklin College
C. Ball State University

IOWA
A. University of Northern Iowa
B. Grand View College
C. Graceland College
D. Iowa Wesleyan
E. Drake University

## Kansas

A. McPherson College
B. Sterling College

Kentucky
A. Eastern Kentucky University
B. Centre College
C. Murray State University
D. University of Louisville

Louisiana
A. Newcomb College

Maine
A. University of Maine - Portland
B. University of Maine - Machias
C. Colby College

Maryland
A. Towson State College
B. Goucher College
C. University of Maryland

## Massachusetts

A. University of Massachusetts
B. Northeastern University

Michigan
A. Western Michigan University
B. University of Michigan
C. Calvin College

Minnesota
A. Winona State College
B. Southwest Minnesota State College
C. Moorhead State College
D. Saint Cloud State College
E. Concordia College

Mississippi
A. Mississippi College
B. Mississippi State College for Women

Missouri
A. School of the Ozarks
B. Southwest Missouri State
C. Central State Missouri University
D. Northwest Missouri State College

Nebraska
A. Chadron State College
B. University of Nebraska
C. Midland Lutheran College
D. Wayne State College

Nevada
A. University of Nevada

New Hampshire
A. University of New Hampshire

New Jersey
A. Jersey City State College
B. St. Peters College

New Mexico
A. New Mexico State University

New York
A. City College of New York
B. Hartwick College
C. State University of New York - Albany
D. University of Rochester
E. S. U. College - Fredonia
F. S. U. of New York - Stonebrook
G. Herbert H. Lehman College

North Carolina
A. Mars Hill College
B. Eastern Carolina University
C. Guilford College
D. Campbell College
E. Wake Forest University
F. Western Carolina University
G. Appalachian State University
H. University of North Carolina

North Dakota
A. North Dakota State College - Fargo
B. Dickinson State College
C. Minot State College

Ohio
A. Baldwin-Wallace College
B. Ohio Wesleyan University
C. Bowling Green State University
D. University of Dayton
E. University of Toledo
F. Ohio University
G. College of Mount St. Joseph

Oklahoma
A. Oklahoma State University
B. Central State University - Edmond
C. Northeastern State College

Oregon
A. Maryhurst College
B. University of Oregon

Pennsylvania
A. Marsfield College
B. Temple University
C. Calrion State College
D. Indiana University - Penn
E. Immaxculata College
F. York College - Penn
G. Bucknell University
H. Slippery Rock State College

Rhode Island
A. Brown University

South Carolina
A. Lander College
B. Coker College
C. Colombia College Drive

South Dakota
A. Dakota State College
B. Northern State College

## Tennessee

A. Lambath College
B. Middle Tennessee State University
C. University of Tennessee at Chattanooga
D. Memphis State University
E. Milligan College
F. University of Tennessee

Texas
A. Stephen F. Austin
B. West Texas State University
C. Texas Christian University
D. Lamar University
E. Prairie View A \& M University
F. Texas Tech University

Utah
A. Brigham Young University B. University of Utah

Virginia
A. Radford College
B. Longwood College
C. University of Virginia
D. Bridgewater College
E. Western Mennonite College
F. Virginia State College
G. Old Dominion University
H. College of William and Mary
I. Sweet Briar College
J. Virginia Polytechnic Institute
K. Averett College

Washington
A. Washington State University
B. Pacific Lutheran University
C. Central Washington State College
D. University of Washington
E. Western Warshington State College
F. Gonzage University

Washington, D.C.
A. Federal City College

## West Virginia

A. West Virginia University
B. West Virginia State College
C. Marshall University
D. Roankie College

Wisconsin
A. University of Wisconsin - Madison
B. University of Wisconsin - Milwaukee
C. University of Wisconsin - La Crosse
D. University of Wisconsin - Silver Falls
E. University of Wisconsin - Stevens Point
F. University of Wisconsin - Menomonie

Wyoming
A. University of Wyoming

APPENDIX B

QUESTIONNAIRE

SPORTS PROGRAM
I. General Information

Respondent's Name

AIAW Region (Circle) $1 \begin{array}{lllllllll} & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9\end{array}$
Please supply all of the following desired information and return it in the enclosed envelope. Your immediate reply will be most gratefully appreciated.

1. How many contests are played per season in each of the following sports?

| $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Skiing |  |  |  |
|  |  |  | Soccer |  |  |  |
|  |  |  | Softball |  |  |  |
|  |  |  | Squash |  |  |  |
|  |  |  | Competitive |  |  |  |
|  |  |  | Swim |  |  |  |
|  |  |  | $\underset{\text { Swim }}{\text { Synchronized }}$ |  |  |  |
|  |  |  | Tennis |  |  |  |
|  |  |  | Track and |  |  |  |
|  |  |  | Field |  |  |  |
|  |  |  | Volleyball |  |  |  |
|  |  |  | Other |  |  |  |

2. What is the length of each varsity sports season (first practice to last game)?
$\left.\begin{array}{llllllll} & \\ 1971- & 1972- & 1973- \\ 1973 & 1974\end{array}\right)$
3. How many hours are devoted to practice in each sport per week?

|  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{gathered} 1973- \\ 1974 \end{gathered}$ |  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Archery |  |  |  | Skiing |  |  |  |
| Badminton |  |  |  | Soccer |  |  |  |
| Basketball |  |  |  | Softball |  |  |  |
| Bowling |  |  |  | Squash |  |  |  |
| Diving |  |  |  | Competitive |  |  |  |
| Fencing |  |  |  | Swim |  |  |  |
| Field Hockey |  |  |  | Synchronized |  |  |  |
| Golf |  |  |  | Swim |  |  |  |
| Gymnastics |  |  |  | Tennis |  |  |  |
| Lacrosse |  |  |  | Track and |  |  |  |
| Riflery |  |  |  | Field |  |  |  |
|  |  |  |  | Volleyball |  |  |  |
|  |  |  |  | Other |  |  |  |

4. How would you rank the top ten sports at your institution? (10 best - l lowest)

| $1971-$ | $1972-$ | $1973-$ | $1971-$ | $1972-$ | $1973-$ |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1972 | 1973 | 1974 |  | 1972 | 1973 | 1974 |



## 4. (Continued)

|  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Golf |  |  |  | Tennis |  |  |  |
| Gymnastics |  |  |  | Track and |  |  |  |
| Lacrosse |  |  |  | Field |  |  |  |
| Riflery |  |  |  | Volleyball |  |  |  |
|  |  |  |  | Other |  |  |  |

5. What are your season records in each of the following?

| $1971-$ | $1972-$ | $1973-$ | $1971-$ | $1972-$ | $1973-$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 1972 | 1973 | 1974 | 1972 | 1973 | 1974 |

Archery
Badminton
Basketball
Bowling
Diving
Fencing
Field Hockey
Golf
Gymnastics
Lacrosse
Riflery
6. Have you attended the STATE tournament in any of the following sports (yes or no), if so, where did you place?

$$
\begin{array}{rrrrrr}
1971- & 1972- & 1973- & 1971- & 1972- & 1973- \\
1972 & 1973 & 1974 & 1972 & 1973 & 1974
\end{array}
$$

Archery
Badminton
Basketball
Bowling
Diving
Fencing
Field Hockey
Golf
7. Have you attended the REGIONAL tournament in any of the following sports (yes or no), if so, where did you place?

| $1971-$ | $1972-$ | 1973 | $1971-$ | $1972-$ | $1973-$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 1972 | 1973 | 1974 | 1972 | 1973 | 1974 |

Archery
Badminton
Basketball
Bowling
Diving
Fencing
Field Hockey
Golf
Gymnastics
Lacrosse
Riflery
8. Have you attended the NATIONAL tournament in any of the following sports, (yes or no), if so, where did you place?

|  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Archery |  |  |  | Skiing |  |  |  |
| Badminton |  |  |  | Soccer |  |  |  |
| Basketball |  |  |  | Softball |  |  |  |
| Bowling |  |  |  | Squash |  |  |  |
| Diving |  |  |  | Competitive |  |  |  |
| Fencing |  |  |  | Swim |  |  |  |
| Field Hockey |  |  |  | Synchronized |  |  |  |
| Golf Gymnastics |  |  |  | Swim <br> Tennis |  |  |  |
| Lacrosse |  |  |  | Track and |  |  |  |
| Riflery |  |  |  | Field |  |  |  |
|  |  |  |  | Volleyball |  |  |  |
|  |  |  |  | Other |  |  |  |

9. According to records which sport has been the most successful in your state?

$$
\begin{array}{rrrrrr}
1971- & 1972- & 1973 & 1971- & 1972- & 1973- \\
1972 & 1973 & 1974 & 1972 & 1973 & 1974
\end{array}
$$

Archery
Badminton
Basketball
Bowling
Diving
9. (Continued)

| $1971-$ | $1972-$ | $1973-$ | $1971-$ | $1972-$ | $1973-$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 1972 | 1973 | 1974 | 1972 | 1973 | 1974 |


10. Would you please supply a team roster of your five leading sports, or any rosters of sports that you might have. (Please include the home state where each participant is from)

## II. Budget

1. What is your total Women's Intercollegiate Sports Budget for this year (1973-1974)?
2. What is your projected Women's Intercollegiate Sports Budget for 1974-1975?

## III. Scholarships

(Please fill out if you offer)

1. How long have you offered scholarships? $\qquad$ 1971-72 $\qquad$ 1972-73 _ 1973-74
2. In which of the following sports do you offer scholarships?

|  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Archery |  |  |  | Skiing |  |  |  |
| Badminton |  |  |  | Soccer |  |  |  |
| Basketball |  |  |  | Softball |  |  |  |
| Bowling |  |  |  | Squash |  |  |  |
| Diving |  |  |  | Competitive |  |  |  |
| Fencing |  |  |  | Swim |  |  |  |
| Field Hockey |  |  |  | Synchronized |  |  |  |
| Golf |  |  |  | Swim |  |  |  |

## 2. (Continued)

|  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{gathered} 1973 \\ 1974 \end{gathered}$ |  | $\begin{array}{r} 1971- \\ 1972 \end{array}$ | $\begin{array}{r} 1972- \\ 1973 \end{array}$ | $\begin{array}{r} 1973- \\ 1974 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gymnastics |  |  |  | Tennis |  |  |  |
| Lacrosse |  |  |  | Track and |  |  |  |
| Riflery |  |  |  | Field |  |  |  |
|  |  |  |  | Volleyball |  |  |  |
|  |  |  |  | Other |  |  |  |

3. What does a scholarship consist of? (Circle)
Tuition Room Board Spending Money Other

DO YOU WISH A SUMMARY OF THE RESULT OF THIS STUDY? YES OR NO (Circle)

Dear Chairman, Women's Intercollegiate Sports:
Under Dr. John Rooney, Chairman of Geography Department, I have undertaken a study to analyze data collected from all AIAW Colleges and Universities concerning Women's Intercollegiate Sports. My interest is to classify teams by region, state, and schools, to see which are the most successful in their respectice sports. Variables, such as scholarships, geographical analysis, spatial organization and landscape will be taken into consideration. This study is being done to collect data for my dissertation in order to complete my Doctor of Education.

It is believed that the results of the study will be of interest to you as well as to all personnel involved with Women's Intercollegiate Sports. Therefore, $I$ am enclosing a questionnaire and am asking you to supply the desired information. Every effort has been made to eliminate the non-essentials and make this questionnaire as brief as possible.

If you will complete the at tached questionnaire, and return it to me in the enclosed envelope, it will be great help and greatly appreciated. A stamped, self-addressed envelope is enclosed for your convenience in replying.

Should you desire the results of the completed study please check the questionnaire in the appropriate place. If your name and address is given, the results will be mailed to you when the study is finished.

Again, your cooperation in this study will be greatly appreciated.

> Sincerely,

Joann Rutherford

APPENDIX C

PURPOSES OF AIAW

1. To foster broad programs of women's intercollegiate athletics which are consistent with the educational aims and objectives of the member schools and in accordance with the philosophy and standards of the NAGWS.
2. To assist member schools in extending and enriching their programs of intercollegiate athletics for women based upon the needs, interests and capacities of the individual student.
3. To stimulate the development of quality leadership for women's intercollegiate athletic programs.
4. To foster programs which will encourage excellence in performance of participants in women's intercollegiate athletics.
5. To maintain the spirit of play within competitive sport events so that the concomitant educational values of such an experience are emphasized.
6. To increase public understanding and appreciation of the importance and value of sports and athletics as they contribute to the enrichment of the life of the woman.
7. To encourage and facilitate research on the effects of intercollegiate athletic women and to disseminate the findings.
8. To further the continual evaluation of standards and policies for participants and programs.
9. To produce and distribute such materials as weill be of assistance to persons in the development and improvement of intercollegiate programs.
10. To hold national championships and to sponsor conferences, institutes, and meetings which will meet the needs of individuals in member schools.
11. To cooperate with other professional groups of similar interests for the ultimate development of sports programs and opportunities for women.
12. To provide direction and maintain a relationship with AIAW regional organizations.
13. To conduct such other activities as shall be approved by the governing body of the Association. (Other rules and regulations concerning women's sports refer to: AIAW Handbook, 1976-1977.)

VITA
Joann Karen Rutherford

Candidate for the Degree of

Doctor of Education

Thesis: WOMEN'S INTERCOLLEGIATE ATHLETICS IN THE UNITED STATES: A GEOGRAPHICAL EXAMINATION 1971-1977

Major Field: Higher Education
Minor Field: Health, Physical Education, and Recreation
Biographical:
Personal Data: Born in Pittsburg, Kansas, June 4, 1949, the daughter of Donald and Marihta Rutherford.

Education: Graduated from Pittsburg Senior High School, Pittsburg, Kansas, in May, 1967; received the Bachelor of Science degree from Pittsburg State University in 1971, with majors in Psychology and Health, Physical Education, and Recreation; received the Master of Science degree from Eastern New Mexico University in 1972, in Physical Education; completed requirements for the Doctor of Education degree at Oklahoma State University in July, 1977, with a major in Higher Education and a specialization in Physical Education.

Professional Experience: Graduate teaching assistant and coach, Department of Physical Education, Eastern New Mexico University, 1971-1972; graduate teaching assistant and coach at Oklahoma State University, 1972-1975. Instructor in Physical Education and coach in Department of Athletics, 1975-present, University of Missouri, Columbia, Missouri; recreation program supervisor and instructor and director of basketball camp in Kansas, Oklahoma, New Mexico, and Missouri from 1966-1977.

