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THE ROLE OF COLLEGE AND UNIVERSITY ATHLETIC TRAINERS  
IN TEXAS AND BORDERING STATES

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THE ROLE OF COLLEGE AND UNIVERSITY ATHLETIC TRAINERS  
IN TEXAS AND BORDERING STATES

DISSERTATION

Presented to the Graduate Council of the  
North Texas State University in Partial  
Fulfillment of the Requirements

For the Degree of

DOCTOR OF EDUCATION

By

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TABLE OF CONTENTS

|  | Page |
|--|------|
| LIST OF TABLES . . . . .   | v    |
| Chapter  |      |
| I. INTRODUCTION . . . . .  | 1    |
| Statement of the Problem   |      |
| Purposes of the Study  |      |
| Hypotheses   |      |
| Background and Significance of the Study   |      |
| Definition of Terms  |      |
| Basic Assumptions  |      |
| Limitations of the Study   |      |
| Procedures for Collecting Data   |      |
| Procedures for Treating Data   |      |
| Summary  |      |
| II. REVIEW OF THE LITERATURE . . . . .   | 18   |
| The Role of the Athletic Trainer   |      |
| The Undergraduate and Practical<br>Experience of the Athletic Trainer                              |      |
| III. COLLECTION OF THE DATA . . . . .  | 80   |
| Construction of the Initial Questionnaire  |      |
| Selection of the Panel of Judges   |      |
| Validation of the Initial Questionnaire  |      |
| Construction of the Final Questionnaire  |      |
| Identification of the National Athletic<br>Training Specialists                                    |      |
| Identification of the Athletic Trainers<br>and Athletic Directors in Texas and<br>Bordering States |      |
| Administration of the Final Questionnaire  |      |
| IV. PRESENTATION OF FINDINGS . . . . .   | 92   |
| Introduction   |      |
| Summary of the Response to the Study   |      |
| Data Related to Part One of the Question-<br>naire: Group I and Group II                           |      |
| Summary of Data Related to Hypothesis I  |      |
| Data Related to Part One of the Question-<br>naire: Group I and Group III                          |      |

Summary of Data Related to Hypothesis II  
 Data Related to Part Two, Sections 1  
 through 3 of the Questionnaire:  
 Group I and Group II  
 Summary of Data Related to Hypothesis III  
 Data Related to Part Two, Sections 1  
 through 3 of the Questionnaire:  
 Group I and Group III  
 Summary of Data Related to Hypothesis IV  
 Data Related to Part Two, Section 4 and  
 5 of the Questionnaire: Group I and  
 Group II  
 Summary of Data Related to Hypothesis V  
 Data Related to Part Two, Section 4 and  
 5 of the Questionnaire: Group I  
 and Group III  
 Summary of Data Related to Hypothesis VI

V. SUMMARY, CONCLUSIONS, IMPLICATIONS AND  
 RECOMMENDATIONS . . . . . 194

Summary  
 Conclusions  
 Implications  
 Recommendations of Suggestions and  
 Guidelines for an Undergraduate  
 Program in Athletic Training  
 Recommendations for Future Research

APPENDIX . . . . . 207  
 BIBLIOGRAPHY . . . . . 233

LIST OF TABLES

| Table  | Page |
|--|------|
| I. Distribution of Athletic Trainers by States . . .   | 95   |
| II. Distribution of Returns of Athletic Trainers<br>Possible from Each State . . . . .                                     | 95   |
| III. Distribution of Athletic Directors by States .  | 96   |
| IV. Distribution of Returns of Athletic Directors<br>Possible from Each State . . . . .                                    | 97   |
| V. Distribution of National Athletic Training<br>Specialists by N.A.T.A. Districts . . . . .                               | 98   |
| VI. Distribution of Returns of National Athletic<br>Training Specialists Possible from Each<br>N.A.T.A. District . . . . . | 99   |
| VII. Summary for Part I, Section 1 of the Question-<br>naire: Group I and Group II on Staff<br>Function . . . . .          | 101  |
| VIII. Summary for Part I, Section 2 of the Question-<br>naire: Group I and Group II on Teaching<br>Function . . . . .      | 103  |
| IX. Summary for Part I, Section 3 of the Question-<br>naire: Group I and Group II on Coaching<br>Function . . . . .        | 105  |
| X. Summary for Part I, Section 4 of the Question-<br>naire: Group I and Group II on<br>Supervisory Function . . . . .      | 107  |
| XI. Summary for Part I, Section 5 of the Question-<br>naire: Group I and Group II on Athletic<br>Training Budget . . . . . | 108  |
| XII. Summary for Part I, Section 6 of the Question-<br>naire: Group I and Group II on Athletic<br>Equipment . . . . .      | 110  |
| XIII. Summary for Part I, Section 7 of the Question-<br>naire: Group I and Group II on Training<br>Room . . . . .          | 113  |

| Table  | Page |
|--|------|
| XIV. Summary for Part I, Section 8 of the Questionnaire: Group I and Group II on Attitude . . . . .  | 115  |
| XV. Summary for Part I, Section 9 of the Questionnaire: Group I and Group II on Team Physician Relationship . . . . .  | 118  |
| XVI. Summary for Part I, Section 10 of the Questionnaire: Group I and Group II on Care and Treatment of Injuries . . . . .   | 120  |
| XVII. Summary for Part I, Section 11 of the Questionnaire: Group I and Group II on Prevention of Injuries . . . . .  | 122  |
| XVIII. Summary for Part I, Section 12 of the Questionnaire: Group I and Group II on Health and Medical Records . . . . .   | 124  |
| XIX. Summary for Part I, Section 13 of the Questionnaire: Group I and Group II on Athletic Facilities . . . . .  | 127  |
| XX. Summary for Part I, Section 14 of the Questionnaire: Group I and Group II on Rehabilitation . . . . .  | 128  |
| XXI. Summary for Part I, Section 15 of the Questionnaire: Group I and Group II on Athletic Contests . . . . .  | 129  |
| XXII. Summary of the Number and Percentage of Items with Significant and Non-Significant $t$ -Ratios for College and University Athletic Trainers and National Athletic Training Specialists (Questionnaire: Part One) . . . . . | 131  |
| XXIII. Summary for Part I, Section 1 of the Questionnaire: Group I and Group III on Staff Function . . . . .   | 136  |
| XXIV. Summary for Part I, Section 2 of the Questionnaire: Group I and Group III on Teaching Function . . . . .   | 137  |
| XXV. Summary for Part I, Section 3 of the Questionnaire: Group I and Group III on Coaching Function . . . . .  | 138  |

| Table   | Page |
|---|------|
| XXVI. Summary for Part I, Section 4 of the Questionnaire: Group I and Group III on Supervisory Function . . . . .             | 140  |
| XXVII. Summary for Part I, Section 5 of the Questionnaire: Group I and Group III on Athletic Training Budget . . . . .        | 141  |
| XXVIII. Summary for Part I, Section 6 of the Questionnaire: Group I and Group III on Athletic Equipment . . . . .             | 142  |
| XXIX. Summary for Part I, Section 7 of the Questionnaire: Group I and Group III on Training Room . . . . .                    | 144  |
| XXX. Summary for Part I, Section 8 of the Questionnaire: Group I and Group III on Attitude . . . . .                          | 146  |
| XXXI. Summary for Part I, Section 9 of the Questionnaire: Group I and Group III on Team Physician Relationship . . . . .      | 148  |
| XXXII. Summary for Part I, Section 10 of the Questionnaire: Group I and Group III on Care and Treatment of Injuries . . . . . | 151  |
| XXXIII. Summary for Part I, Section 11 of the Questionnaire: Group I and Group III on Prevention of Injuries . . . . .        | 152  |
| XXXIV. Summary for Part I, Section 12 of the Questionnaire: Group I and Group III on Health and Medical Records . . . . .     | 154  |
| XXXV. Summary for Part I, Section 13 of the Questionnaire: Group I and Group III on Athletic Facilities . . . . .             | 156  |
| XXXVI. Summary for Part I, Section 14 of the Questionnaire: Group I and Group III on Rehabilitation . . . . .                 | 157  |
| XXXVII. Summary for Part I, Section 15 of the Questionnaire: Group I and Group III on Athletic Contests . . . . .             | 159  |



| Table   | Page |
|---|------|
| XXXVIII. Summary of the Number and Percentages of Items with Significant and Non-Significant t-Ratios for College and University Athletic Trainers and College and University Athletic Directors (Questionnaire: Part One) . . .        | 161  |
| XXXIX. Summary for Part II, Section 1 of the Questionnaire: Group I and Group II on Undergraduate Degrees . . . . .   | 163  |
| XL. Summary for Part II, Section 2 of the Questionnaire: Group I and Group II on Academic Courses I. . . . .  | 165  |
| XLI. Summary for Part II, Section 3 of the Questionnaire: Group I and Group II on Academic Courses II . . . . .   | 168  |
| XLII. Summary of the Number and Percentages of Items with Significant and Non-Significant t-Ratios for College and University Athletic Trainers and National Athletic Training Specialists (Questionnaire: Part Two, Items 1-47) . .    | 171  |
| XLIII. Summary for Part II, Section 1 of the Questionnaire: Group I and Group III on Undergraduate Degrees . . . . .  | 173  |
| XLIV. Summary for Part I, Section 1 of the Questionnaire: Group I and Group III on Academic Courses I . . . . .   | 175  |
| XLV. Summary for Part II, Section 1 of the Questionnaire: Group I and Group III on Academic Courses II . . . . .  | 177  |
| XLVI. Summary of the Number and Percentages of Items with Significant and Non-Significant t-Ratios for College and University Athletic Trainers and College and University Athletic Directors (Questionnaire: Part Two, Items 1-47) . . | 181  |
| XLVII. Summary for Part II, Section 4 of the Questionnaire: Group I and Group II on Student Position . . . . .  | 183  |

| Table   | Page |
|---|------|
| XLVIII. Summary for Part II, Section 5 of the Questionnaire: Group I and Group II on Student Function . . . . .   | 185  |
| XLIX. Summary of the Number and Percentages of Items with Significant and Non-Significant t-Ratios for College and University Athletic Trainers and National Athletic Training Specialists (Questionnaire: Part Two, Items 48-64) . . . . .   | 187  |
| L. Summary for Part II, Section 4 of the Questionnaire: Group I and Group III on Student Position . . . . .   | 189  |
| LI. Summary for Part II, Section 5 of the Questionnaire: Group I and Group III on Student Function . . . . .  | 190  |
| LII. Summary of the Number and Percentages of Items with Significant and Non-Significant t-Ratios for College and University Athletic Trainers and College and University Athletic Directors (Questionnaire: Part Two, Items 48-64) . . . . . | 192  |

## CHAPTER I

### INTRODUCTION

There have been athletic trainers as far back in time as the Greek Olympic Games. At that time these individuals were referred to as gymnastai. One of the duties of gymnastai was to utilize what little knowledge they had in the fields of anatomy, physiology, and dietetics to keep athletes in good condition for athletic competition. Another duty was to employ hot baths, massage, anodynes, and other measures in increasing the physical development and performance of the athletes.

Athletic training as we know it today began to emerge during the last part of the nineteenth century as interscholastic and intercollegiate athletic programs came into being. The trainers at that time were considered to be of questionable character because of the various unethical practices used in their work. As a result of this, it has taken the athletic trainer half a century to become recognized as a professional person. Hence, for many years the role of the athletic trainer has been virtually undefined.<sup>1</sup>

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<sup>1</sup>Carl E. Klafs and Daniel D. Arnheim, Modern Principles of Athletic Training (St. Louis, 1963), pp. 15-16.

At the present time athletic programs in our public and private colleges and universities are increasing both in number of participants and in number of activities offered. Along with this increase, there has been an increase in the number of injuries as a result of participation in athletics. It has become necessary for many colleges and universities to hire an athletic trainer or to designate someone on the athletic staff to be responsible for the prevention and care of injuries to athletes. As more and more responsibility is being placed upon the athletic trainer, there is a need to define his role as a college or university athletic trainer. At the same time there is also a need for colleges and universities to plan to inaugurate an undergraduate major in athletic training to provide adequately prepared personnel.

#### Statement of the Problem

The problem of this study was to compare the existing role of college and university athletic trainers in Texas and bordering states with the role of college and university athletic trainers, (1) as recommended by national athletic training specialists and (2) as recommended by college and university athletic directors in Texas and bordering states.

#### Purposes of the Study

The following purposes were formulated:

1. To determine the role of college and university athletic trainers reported by college and university athletic trainers in Texas and bordering states.

2. To determine the role of college and university athletic trainers recommended by national athletic training specialists.

3. To determine the role of college and university athletic trainers recommended by college and university athletic directors in Texas and bordering states.

4. To compare the role of the athletic trainer reported by athletic trainers in colleges and universities of Texas and bordering states with the role of the athletic trainer recommended by selected national athletic training specialists.

5. To compare the role of the athletic trainer reported by athletic trainers in colleges and universities of Texas and bordering states with the role of the athletic trainer recommended by college and university athletic directors in Texas and bordering states.

6. To determine the academic preparation of college and university athletic trainers in Texas and bordering states.

7. To determine the academic preparation of college and university athletic trainers recommended by national athletic training specialists.

8. To determine the academic preparation of college and university athletic trainers recommended by college and university athletic directors in Texas and bordering states.

9. To compare the academic preparation of the athletic trainer reported by athletic trainers in colleges and

universities of Texas and bordering states with the academic preparation recommended by selected national athletic training specialists.

10. To compare the academic preparation of the athletic trainer reported by athletic trainers in colleges and universities of Texas and bordering states with the academic preparation recommended by college and university athletic directors in Texas and bordering states.

11. To determine the undergraduate practical experience received by college and university athletic trainers in Texas and bordering states.

12. To determine the undergraduate practical experience recommended by national athletic training specialists.

13. To determine the undergraduate practical experience recommended by college and university athletic directors in Texas and bordering states.

14. To compare the undergraduate practical experience reported by athletic trainers in colleges and universities of Texas and bordering states with the undergraduate practical experience recommended by national athletic training specialists.

15. To compare the undergraduate practical experience reported by athletic trainers in colleges and universities of Texas and bordering states with the undergraduate practical experience recommended by college and university athletic directors in Texas and bordering states.

16. To propose suggestions and guidelines which would be appropriate in developing an undergraduate degree program in the field of athletic training. These proposals were identified through an interpretation of the responses of college and university athletic trainers and athletic directors in Texas and bordering states and national athletic training specialists.

#### Hypotheses

I. Each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, will differ significantly from the corresponding role recommended by national athletic training specialists.

II. Each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, will differ significantly from the corresponding role recommended by college and university athletic directors in Texas and bordering states.

III. Academic preparation received by college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate academic curriculum recommended by national athletic training specialists.

IV. Academic preparation received by college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate academic

curriculum recommended by college and university athletic directors in Texas and bordering states.

V. The undergraduate practical experience received by college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate practical experience recommended by national athletic training specialists.

VI. The undergraduate practical experience received by college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate practical experience recommended by college and university athletic directors in Texas and bordering states.

#### Background and Significance of the Study

The field of athletic training has become a matter of considerable concern to many people. The athletic trainer has become an integral part of the physical education program in the colleges and universities. To help provide adequately prepared athletic trainers, colleges and universities are attempting to identify the specific role of the athletic trainer and the professional preparation needed to carry out that role effectively.

Although there are considerable amounts of information concerning procedures and techniques of preventing and caring for athletic injuries, there is a limited number of professional studies which identify the role and professional



preparation of the athletic trainer. Studies by Cole<sup>2</sup> and Slaughter<sup>3</sup> revealed the role of athletic trainers in secondary schools in Rhode Island and New England, respectively. Cole attempted to determine how athletic injuries were prevented and cared for by the athletic trainers. Slaughter studied the training room facilities and the men supervising the training rooms. Peck<sup>4</sup> conducted a study similar to Cole's study when he surveyed the athletic trainers and training room facilities in Rhode Island. The professional education of the athletic trainer received but a limited amount of emphasis in each of the above studies.

Several studies were completed during the early 1960's which had the college or university athletic trainer as their major concern. Kennedy<sup>5</sup> investigated the role and status of the athletic trainer in four-year colleges and

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<sup>2</sup>Richard K. Cole, "A Study of the Care and Prevention of Athletic Injuries in the Secondary Schools of Rhode Island," unpublished master's thesis, School of Education, University of Rhode Island, Kingston, Rhode Island, 1955.

<sup>3</sup>Robert D. Slaughter, "An Investigation of the Trainers and Training Room Facilities in the High Schools of New England," unpublished master's thesis, School of Education, Springfield College, Springfield, Massachusetts, 1953.

<sup>4</sup>Eugene H. Peck, "Athletic Trainers and Training Room Facilities in the Secondary Schools of Rhode Island," unpublished master's thesis, School of Education, Springfield College, Springfield, Massachusetts, 1965.

<sup>5</sup>Martin A. Kennedy, "An Analysis of the Role and Status of the Athletic Trainer in the Four Year Colleges and Universities of California," unpublished master's thesis, Department of Physical Education, San Diego State College, San Diego, California, 1962.

universities in California during 1962. An evaluation of professional qualifications of small college athletic trainers throughout the nation was the purpose of a study conducted by Graham<sup>6</sup> in 1965. Johnson and Newell<sup>7</sup> attempted to identify the duties and responsibilities of athletic trainers who were members of the National Athletic Trainers Association during 1964. The membership of the Association includes both secondary school and college and university athletic trainers. Although a study by Dolan<sup>8</sup> did not emphasize the professional preparation of the athletic trainer, he did offer some guidelines to be used when preparing a person to be an athletic trainer.

Some specific events concerning the professional preparation of the athletic trainer have occurred since 1954. At that time the National Athletic Trainers Association (N.A.T.A.) appointed a committee to study the professional advancement of the athletic trainer. There were four approaches made to

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<sup>6</sup>Gordon L. Graham, "An Evaluation of the Professional Qualifications of Athletic Trainers at the Small College Level," unpublished master's thesis, Graduate School, Mankato State College, Mankato, Minnesota, 1963.

<sup>7</sup>Roger L. Johnson and William E. Newell, "Assessment of the Duties and Responsibilities of Athletic Trainers in the National Athletic Trainers Association," The Journal of the National Athletic Trainers Association (August, 1964), pp. 17-19.

<sup>8</sup>Joseph P. Dolan, "Current Prophylactic and Therapeutic Problems in Intercollegiate Football," unpublished doctoral dissertation, Graduate Division, University of North Dakota, Grand Forks, North Dakota, 1948, pp. 323-333.

this problem: (a) the specific areas that should be covered in the athletic training field to assure a qualified trainer; (b) how the program could best use existing facilities; (c) who would be charged with the responsibilities of placement after the trainer is qualified; and (d) what type of person would the school hire and what academic qualifications would be required? As a result of this committee's report, the N.A.T.A. recommended the basic minimal requirements for the professional preparation of the athletic trainer. The program emphasized the degree should be a major in health and physical education, with a recommendation of advanced work leading to certification in physical therapy.<sup>9</sup> In an effort to raise the standards of athletic training, these proposals were re-examined by the Association during 1966-67.<sup>10</sup> The results of the re-examination were not available at the time of this writing.

In January, 1962, the American Association for Health, Physical Education and Recreation (A.A.H.P.E.R.) held a Professional Preparation Conference which was one of the largest and most ambitious projects ever undertaken by that association. Their final report included a list of minimum

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<sup>9</sup> National Athletic Trainers Association, An Athletic Training Program, A Report on the Professional Preparation of the Athletic Trainer (Lafayette, Indiana, 1955), pp. 1-4.

<sup>10</sup> National Athletic Trainers Association, Re-Examination of Professional Preparation of the Athletic Trainer, Report from the Board of Directors (Lafayette, Indiana, 1966), pp. 1-2.

competencies for athletic trainers.<sup>11</sup> According to William E. Newell, Executive Secretary, N.A.T.A., this was the first time that the educational preparation of the athletic trainer was recommended by any branch of the National Education Association (N.E.A.).<sup>12</sup>

The American Medical Association (A.M.A.), at its annual convention in Atlantic City, New Jersey, during June, 1967, acknowledged its support of the N.A.T.A.'s attempt to upgrade the professional preparation of athletic trainers. The Association adopted the recommendations that

(1) The American Medical Association recognize the importance of the role of the professionally prepared athletic trainer, as a part of the team responsible for the health care of the athlete;

(2) The National Athletic Trainers Association be commended for its efforts to upgrade professional standards, since improved preparation and continuing education enable athletic trainers to work effectively with physicians in the health supervision of sports; and,

(3) State and local medical societies and physicians individually be encouraged to help advance the professional goals of the National Athletic Trainers Association in their communities through appropriate liaison activities.<sup>13</sup>

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<sup>11</sup>American Association for Health, Physical Education and Recreation, Professional Preparation in Health, Physical Education and Recreation (Washington, D.C., 1962), pp. 70-72.

<sup>12</sup>Letter from William E. Newell, Executive Secretary of the National Athletic Trainers Association, July 18, 1967.

<sup>13</sup>American Medical Association, Professional Standards of Athletic Trainers, Report of the Board of Trustees (Atlantic City, 1967), pp. 1-2.

It should be pointed out that although the above studies and pertinent reports have mentioned the role and professional preparation of the athletic trainer, only one of the studies, Dolan,<sup>14</sup> included recommendations for the professional preparation of the athletic trainer. No study was found to survey the recommendations of college and university athletic directors or national athletic training specialists concerning the role or professional preparation of the college and university athletic trainer. Also, no study was found to include all college and university athletic trainers in Texas and bordering states.

#### Definition of Terms

1. Role is used to signify those activities or duties which are performed by the athletic trainer.
2. Athletic trainer is used to refer to a person who is responsible for the prevention and care of injuries to athletes.
3. Full-time athletic trainer is used to refer to a person who is hired by the college or university and who is responsible for a full work load. This load may consist of only athletic training duties or may consist of athletic training duties along with other duties such as coaching or classroom instruction.

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<sup>14</sup>Dolan, op. cit.

4. National athletic training specialists refers to individuals recommended by the National Athletic Trainers Association who have written extensively or have had extensive professional experience in the field of athletic training.

5. Professional preparation refers to both academic preparation and practical experience of the athletic trainer as an undergraduate student.

6. Practical experience refers to those activities and experiences one is associated with while being actively involved in the field of athletic training.

#### Basic Assumptions

1. It was assumed that the selected national athletic training specialists would be a representative sample of national athletic training specialists.

2. It was assumed that the individuals participating in this study would respond to the questionnaire honestly.

#### Limitations of the Study

1. The study was limited to those four-year colleges and universities in Texas and bordering states which have a designated full-time athletic trainer.

2. The study investigated only the role and professional preparation of the athletic trainer and was not concerned with the methods and techniques of prevention and care of injuries to athletes.

3. The study was limited to the 1967-68 school year.

#### Procedures for Collecting Data

The data were collected in the following manner:

1. The initial questionnaire was constructed. The questionnaire consisted of topics taken from a survey of the current literature concerning athletic training. The questionnaire had two parts. Part One was concerned with the role of the athletic trainer, and Part Two was concerned with the professional preparation of the athletic trainer. The questionnaire was used with the three groups of the study-- the college and university athletic trainers, national athletic training specialists, and college and university athletic directors.

2. A panel of seven judges for testing the validity of the instrument to be administered was selected. The panel was composed of physical therapists, Doctors of Philosophy or Doctors of Education involved in athletics, or active athletic trainers, or any combination of these titles. The questionnaire, with an accompanying letter, was mailed to each of the seven judges. They were requested to respond by indicating whether they thought each item of the questionnaire was valid for use in the study, invalid for use in the study, or whether they were unable to make a decision. A minimum of four of the seven judges were to agree that an item was valid for use in the study for it to have been retained in the final questionnaire. Those items which did not

have sufficient agreement were to be deleted from the questionnaire. Additional suggestions made by the panel were to be returned to the members for their further consideration.

3. After validity was established, the subjects for the study were selected. This was accomplished in the following manner:

a. Athletic trainers.--Through a review of the membership roll of the N.A.T.A.<sup>15</sup> and The Blue Book of College Athletics,<sup>16</sup> a list was compiled of all college and university full-time athletic trainers in Texas and bordering states. Each of these athletic trainers was asked to participate in the study. A minimum of thirty returned questionnaires from college and university athletic trainers was arbitrarily set for the study.

b. National athletic training specialists.--Sixty national athletic training specialists were selected from a list provided by the Executive Secretary of the N.A.T.A. The minimum number of specialists necessary for the study was arbitrarily set at thirty.

c. Athletic directors.--The athletic directors of colleges and universities in Texas and bordering states which have a full-time athletic trainer were asked to

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<sup>15</sup>National Athletic Trainers Association, National Athletic Trainers Association Membership Roster (January, 1968), pp. 1-25.

<sup>16</sup>Akron Engraving Company, The Blue Book of College Athletics (Cleveland, 1967).



participate in the study. Their names were taken from The Blue Book of College Athletics<sup>17</sup> and current state sports guides of each of the five states involved: Texas Sports Guide,<sup>18</sup> Oklahoma Coaches Directory,<sup>19</sup> Louisiana Sports Guide,<sup>20</sup> Arkansas Sports Guide,<sup>21</sup> and Arizona-New Mexico Sports Guide.<sup>22</sup> The minimum number of athletic directors to be used in the study was arbitrarily set at thirty.

4. Questionnaires were mailed to each of the above subjects. The athletic trainers were asked to respond in accordance to the role they were practicing and the professional preparation they had undertaken. The items in Part One were responded to by circling "yes" or "no" after each item to signify: "Yes, this item is one of my roles as a college or university athletic trainer," or "No, this item is not one of my roles as a college or university athletic trainer." In part Two of the instrument this group was asked to rate each of the items according to what level of

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<sup>17</sup> Ibid.

<sup>18</sup> Ray Franks, editor, Texas Sports Guide (Amarillo, Texas, 1967), pp. 56-62.

<sup>19</sup> Jerry Andress and Clell Wade, editors, Oklahoma Coaches Directory (Quincy, Illinois, 1967), pp. 67-69.

<sup>20</sup> Glen Zulauf, editor, Louisiana Sports Guide (Amarillo, Texas, 1967), pp. 6-10.

<sup>21</sup> Glen Zulauf, editor, Arkansas Sports Guide (Amarillo, Texas, 1967), pp. 6-10.

<sup>22</sup> Ray Franks, editor, Arizona-New Mexico Sports Guide (Amarillo, Texas, 1967), p. 46.

emphasis was received during their undergraduate professional education. A rating scale of from "one" to "four" was used, "four" being much emphasis, and "one" receiving no emphasis.

National athletic training specialists and college and university athletic directors were asked to respond to the items according to what they believed ought to be recommended. The items in Part One concerning the role of the athletic trainer were responded to by circling "yes" or "no" after each item to signify: "Yes, this item ought to be a role of the college or university athletic trainer," or "No, this item ought not to be a role of the college or university athletic trainer." In Part Two of the instrument these two groups were asked to rate each of the items according to what they believed to be an optimum amount of emphasis necessary in the undergraduate professional preparation of college and university athletic trainers. A rating scale of from "one" to "four" was used, "four" being much emphasis, and "one" recommending no emphasis.

In each phase of the study, a follow-up memorandum and an additional questionnaire was mailed two weeks later to each subject who had not returned the questionnaire.

#### Procedures for Treating Data

The data for each item was entered on IBM cards and statistical computations were made at the Data Processing Center at North Texas State University.

To test Hypotheses I and II, the standard error of the difference between two independent proportions was divided into the difference between the two percentages to find the value of  $\underline{t}$ .

To test Hypotheses III through VI, the Fisher's  $\underline{t}$  was used to test the significance of the difference between the means obtained for each item in the questionnaire and for the combined means for each section of the questionnaire.

The hypotheses were acceptable at the .05 level of confidence.

#### Summary

Chapter I has had as its purpose the introduction and statement of the problem. The background and significance section attempted to show the lack of studies available concerning the role and professional preparation of college and university athletic trainers. Also emphasized was the current concern shown pertaining to the problem of this study by several national organizations. The studies and reports mentioned are dealt with at length in Chapter II.

The last section of Chapter I has briefly outlined the procedures that were taken in completing the study. Detailed information on these procedures is related in Chapter III. The findings of the study are reported in Chapter IV. Conclusions, implications, and recommendations are presented in Chapter V.

## CHAPTER II

### REVIEW OF THE LITERATURE

The review of the literature was undertaken to obtain data for the development of the instrument used in the study, and to review the role and professional preparation mentioned in the literature. The literature reviewed for the study was grouped into two categories: (1) literature concerning the role of the athletic trainer, and (2) literature concerning the undergraduate academic and practical experience in the professional preparation of the athletic trainer. Each of these two categories was examined from the materials found in studies, reports, articles and books.

#### The Role of the Athletic Trainer

The Dictionary of Occupational Titles defines the athletic trainer as one who

. . . improves physical fitness of athletes for participation in various sports, such as basketball, boxing, and football. Prescribes routine and correction exercises to strengthen muscles. Recommends special diets to build up health and reduce overweight persons. Massages part of player's bodies to relieve soreness, strains, and bruises. Renders first aid to injured persons, such as giving artificial respiration, cleaning and bandaging wounds, and applying heat and cold to promote healing. Calls the doctor for injured persons as required. May give heat and diathermy treatments as prescribed by health service. May make arrangements for hotel accommodations and for transportation to other places

for sports participation. May be designated according to sport in which engaged.<sup>1</sup>

Several studies have been conducted which dealt with the role of the athletic trainer. These studies involved either the high school athletic trainer or the college or university athletic trainer. Cole<sup>2</sup> conducted a study of the care and prevention of athletic injuries in the secondary schools of Rhode Island. He recommended that a thorough medical examination be given to all varsity athletic candidates just prior to each sport season in which the athletes planned to participate. He also suggested that an athletic trainer, in the absence of a physician, and not a coach should decide the fitness of an athlete for further participation after an injury.

Peck<sup>3</sup> surveyed the public schools of Rhode Island to gather information about athletic trainers and training room facilities. With thirty-three of thirty-nine secondary schools reporting, he concluded that the athletic training

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<sup>1</sup>U.S. Employment Service, Dictionary of Occupational Titles (Washington, D.C., 1962), p. 29.

<sup>2</sup>Richard K. Cole, "A Study of the Care and Prevention of Athletic Injuries in the Secondary Schools of Rhode Island," unpublished master's thesis, School of Education, University of Rhode Island, Kingston, Rhode Island, 1955, p. 55.

<sup>3</sup>Eugene H. Peck, "Athletic Trainers and Training Room Facilities in the Secondary Schools of Rhode Island," unpublished master's thesis, School of Education, Springfield College, Springfield, Massachusetts, 1965, p. 52.

personnel and equipment varied from good to poor. Only two of the schools had full time athletic trainers.

Slaughter<sup>4</sup> conducted an investigation of the trainers and training room facilities in the high schools of New England. He found that there were only 21 athletic trainers in the 169 high schools. One school of the remaining 148 schools had a building custodian handling the first aid treatment of injuries incurred during practice sessions. Four of the schools had no facilities whatsoever to treat athletic injuries, however, they did have the availability of a nearby college facility.

Cochell<sup>5</sup> examined the responsibilities of the athletic trainer in the junior colleges of California. Through the use of a questionnaire it was revealed that thirty-one junior colleges in California hired athletic trainers. Responsibilities listed by the largest number of athletic trainers were preventive strapping, rehabilitating injuries, prescribing treatment following injury, checking for broken equipment during the season, and diagnosing injuries. Other responsibilities included the pre-season role of arranging

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<sup>4</sup>Robert D. Slaughter, "An Investigation of the Trainers and Training Room Facilities in the High Schools of New England," unpublished master's thesis, School of Education, Springfield College, Springfield, Massachusetts, 1953, p. 21.

<sup>5</sup>Larry Cochell, "Preparation, Responsibilities, and Status of the Athletic Trainer in the Junior Colleges in California," unpublished master's thesis, Department of Physical Education, Utah State University, Logan, Utah, 1965, pp. 20-30.

for the physical examination of the athletes and ordering and checking supplies.

Rader<sup>6</sup> conducted a study to determine and analyze current practices pertaining to medical care and insurance coverage of high school athletes in the State of Illinois. He wanted to ascertain the extent to which the schools were protecting and safeguarding the health of high school athletes. He found that 100 per cent of the schools reporting required a health examination before a student could compete in an interscholastic sport. Only 6-2/10 per cent of the schools required a second health examination before participation in a second sport. He also found that there was no real difference in practices between the large and small schools with the exception that the larger schools were more likely to have a physician at more athletic contests.

Undestad<sup>7</sup> surveyed ninety-two public schools in the State of Illinois to determine the role of the individuals responsible for the operation of the athletic training rooms. After examining four groups of schools, he concluded that

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<sup>6</sup>John W. Rader, "Current Practices Concerning Medical Care and Insurance Coverage of the High School Athletes in Illinois," unpublished master's thesis, School of Physical Education, University of Illinois, Urbana, Illinois, 1962, pp. 48-53.

<sup>7</sup>Fred Undestad, "The Design and Usage of Athletic Training Rooms and the Role of the Individuals Responsible for Their Operation in Selected Illinois High Schools," unpublished master's thesis, Graduate School, Northern Illinois University, Dekalb, Illinois, 1965, pp. 105-106.

the group of schools with the smallest enrollment was the most adequately equipped, housed, and staffed of the four groups having a training room. The group of schools with the largest enrollment, with all its space, money, and staff, lacked adequate training room facilities, equipment, and people to operate the training room.

A survey by McLaughlin<sup>8</sup> examined the training room practices and procedures in 100 high schools across the United States. He found that 36 of the schools had an athletic trainer on duty. Thirteen were full-time athletic trainers. The schools spent an average of eighty-seven cents per participant on training supplies, or an average of \$270.00 per school per year on training supplies.

Several studies have been conducted to determine the duties of athletic trainers in the colleges and universities. In a study by Kennedy<sup>9</sup> of the role and status of the athletic trainer in the four year colleges and universities in California the following conclusions were drawn. Twenty-eight of the thirty-six colleges and universities contacted responded to the instrument. Fifty per cent of the schools

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<sup>8</sup>James J. McLaughlin, "A Survey of Training Room Practices and Procedures in High School," unpublished master's thesis, Department of Physical Education, Purdue University, Lafayette, Indiana, 1951, pp. 56-62.

<sup>9</sup>Martin A. Kennedy, "An Analysis of the Role and Status of the Athletic Trainers in the Four Year Colleges and Universities of California," unpublished master's thesis, Department of Education, San Diego State College, San Diego, California, 1962, pp. 39-47.



employed a full-time athletic trainer. The athletic trainers were hired by the athletic director in more than half of the twenty-eight schools. Also, more than 50 per cent of the athletic trainers had additional duties other than athletic training activities. Included in these supplementary responsibilities were classroom teaching and demonstrating, coaching, and/or taking care of athletic equipment.

Burnett<sup>10</sup> conducted a job analysis of college athletic trainers in six large athletic conferences in the United States. He found that the majority of the athletic trainers had some supervisory duties. Also reported was that the athletic trainers had duties that included preventive work, treatment of injuries, post-operative care, and many other miscellaneous duties. Duties of the athletic trainer other than training were rather varied. Five other duties mentioned were: classroom teaching, equipment purchasing, equipment supervisor, coaching, and supervising the athletic training table.

Johnson was instrumental in conducting two national surveys involved with the assessment of the duties and responsibilities of athletic trainers. In 1962 he conducted a survey of 100 colleges and/or universities throughout the

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<sup>10</sup>Nolan K. Burnett, "A Job Analysis of College Athletic Trainers," unpublished master's thesis, Department of Physical Education, Utah State University, Logan, Utah, 1958, pp. 12-24.

United States.<sup>11</sup> Sixty-five per cent of the athletic trainers reporting had teaching responsibilities. The "Care and Prevention of Athletic Injuries" was the most frequently taught subject. The National Athletic Trainers Association (N.A.T.A.) was the professional organization in which most (89 per cent) of the athletic trainers held membership. The next highest membership (37 per cent) was in the American Association for Health, Physical Education and Recreation (A.A.H.P.E.R.). The study also showed that there were as many as seven types of patients treated by the athletic trainer. These included: college and university athletes, faculty, faculty dependents, staff other than teachers, college students, private patients, and high school athletes.

During 1964 Newell collaborated with Johnson in a second study of the assessment of the duties and responsibilities of athletic trainers.<sup>12</sup> This particular study involved only members of the N.A.T.A. A total of 324 N.A.T.A. members participated in the study. Fifty-seven per cent of the athletic trainers reporting had some teaching responsibilities. The "Prevention and Care of Athletic Injuries"

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<sup>11</sup>Roger Leroy Johnson, "Assessment of the Duties and Responsibilities of Athletic Trainers at the College Level," unpublished master's thesis, Department of Physical Education, Purdue University, Lafayette, Indiana, 1962, pp. 28, 60.

<sup>12</sup>Roger Leroy Johnson and William E. Newell, "Assessment of the Duties and Responsibilities of Athletic Trainers in the National Athletic Trainers Association," The Journal of the National Athletic Trainers Association (August, 1964), pp. 17-19.

was, as in the previous study, found to be the course taught most frequently. In the area of the survey pertaining to the various classifications of patients treated by athletic trainers, other than athletes, it was found that the faculty and general students were treated most frequently by athletic trainers at the various school levels. The study also revealed the following facts about the medical doctor and the athletic trainer relationship: 4 per cent of the athletic trainers were permitted to diagnose major injuries; 62 per cent minor injuries; and 22 per cent both major and minor injuries. The writers, Newell and Johnson, also found that in 29 per cent of the schools the team physician was at both practice periods and contests; however, 98 per cent of the team physicians did attend the contests.

Blickenstaff<sup>13</sup> reported sending questionnaires to all the high school athletic trainers that were members of the N.A.T.A. He received fifty-nine returns out of the eighty questionnaires mailed. His survey tried to determine what the typical high school trainer did, what the high school could be doing, and what the college trainers could do to help. He stated that, as a teacher of future athletic trainers, the college athletic trainer should emphasize the high school field as a definite job possibility to the

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<sup>13</sup>Mel Blickenstaff, "New Horizons in Athletic Training," The Journal of the National Athletic Trainers Association (October, 1962), pp. 7-10.

student. Also observed was the fact that the future athletic trainer must learn that an outstanding job can be accomplished with a minimum of equipment. Above all, young athletic trainers must be taught to work. He stressed the fact that if a college athletic trainer gave a speech to a group of coaches, school administrators, or a service club he should not pass up the opportunity to emphasize that every high school could and should have an athletic trainer.

The college coach and athletic trainer relationship was studied by Railey<sup>14</sup> in the 1962-63 school year. The purpose of the study was to inform the athletic trainers and prospective athletic trainers of how the coaches perceive them in the athletic training field. Head football coaches in sixty-one major colleges and universities responded to a questionnaire. Only 8 per cent of the coaches reporting were of the opinion that the head athletic trainer was a staff specialist with equal rank as themselves; 33 per cent felt that the head athletic trainer was a staff specialist with a lower rank than themselves; and, 57 per cent looked upon the head athletic trainer as an assistant on the staff. Ninety-seven per cent of the coaches answered that they abided by the head athletic trainer's decision to hold an injured or ill player out of practice or a game. On the

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<sup>14</sup> Jimmy H. Railey, "The Coach-Trainer Relationship: College Coaches Report," The Journal of the National Athletic Trainers Association (August, 1963), pp. 6-7.

subject of the integrity of the head athletic trainers, 89 per cent of the coaches felt that they could always confide in the head athletic trainer.

The Committee on the Medical Aspects of Sports, during 1961, conducted a cooperative survey regarding the provisions made for medical care of athletes in colleges and universities in the United States.<sup>15</sup> The survey was prompted by the desire of the Committee to ascertain duties, responsibilities, and conditions of employment of physicians and athletic trainers serving the athletic departments in colleges and universities. The results from 533 questionnaires returned revealed that approximately 75 per cent of the National Collegiate Athletic Association (N.C.A.A.) colleges and about 60 per cent of the National Association of Intercollegiate Athletics (N.A.I.A.) colleges provided complete care for the athletes. About 20 per cent and 30 per cent, respectively, provide emergency care and some follow-up care for the athletes. Four of the N.A.I.A. schools provided no medical supervision of the athletes. About 75 per cent of the colleges in both groups indicated that supervision was provided for all sports. In the majority of the remaining schools medical care was provided for body contact sports only. The majority of the N.C.A.A.

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<sup>15</sup>Allan J. Ryan, "Survey of Status of Team Physicians in the United States," Proceedings of the Fourth National Conference on the Medical Aspects of Sports (Los Angeles, 1962), pp. 4-7.

colleges indicated that the athletic trainer was responsible to either the team physician, the coach, the athletic director, or the student health service. In about 50 per cent of the N.A.I.A. colleges the athletic trainer was responsible only to the coach. The team physician had complete and final authority for determining the ability of an athlete to participate at any given time in about 95 per cent of the N.C.A.A. and 90 per cent of the N.A.I.A. colleges.

In 1955 the N.A.T.A. approved a specific guideline as to the role of the athletic trainer.<sup>16</sup> The Association stated that members of the athletic training profession should be qualified to give service in the following areas: athletics, physical education, and student health. The athletic trainer should be responsible, under medical supervision and with cooperation of administrators and coaches, for the total prescription of athletic training and conditioning. Four areas of responsibility were included: prevention, first aid, after treatment, and rehabilitation.

Many articles have been written for periodicals concerning the care and prevention of injuries to athletes. Writers have been dealing with this topic for the majority of the last seventy years. But, few writers have concerned themselves with the study of the role of the athletic trainer

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<sup>16</sup> National Athletic Trainers Association, An Athletic Training Program, A Report on the Professional Preparation of the Athletic Trainer (Lafayette, Indiana, 1955), pp. 1-2.

and the professional preparation necessary to carry out this role. Beginning in the early 1950's, several articles concerning the athletic trainer began to appear in athletic periodicals. The athletic trainer in high school was the area of interest in many of these articles.

Cole<sup>17</sup> states, in an article about the athletic trainer in secondary schools, that athletic trainers are medical technicians. He quotes Robert G. Brashear, orthopedic surgeon and team physician, University of Tennessee:

". . . athletic trainers actually practice medicine."<sup>18</sup>

But to avoid any misunderstandings, Cole qualifies Brashear's statement by stating, "Trainers always work directly under the wing of the team physician and do not, or never should, perform any medical functions, unless permitted to do so by their medical supervisor."<sup>19</sup>

In a second article, Cole<sup>20</sup> reminds readers that the athletic trainer's duties are many and diversified. The athletic trainer's main responsibility is the physical

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<sup>17</sup>Richard K. Cole, "Part One--The Athletic Trainer in Secondary Schools," The Athletic Journal, XXXIV (March, 1954), 22, 66.

<sup>18</sup>Robert G. Brashear, orthopedic surgeon and team physician, University of Tennessee, cited in Richard K. Cole, "Part One--The Athletic Trainer in Secondary Schools," The Athletic Journal, XXXIV (March, 1954), 22.

<sup>19</sup>Cole, op. cit., p. 22.

<sup>20</sup>Richard K. Cole, "Part Two--The Athletic Trainer in Secondary Schools," The Athletic Journal, XXXIV (April, 1954), 15, 49-53.

welfare of the athlete--before, during, and after athletic competition. He believes that it is the business of the athletic trainer to know whether or not an athlete is ready for a contest. The author emphasizes the fact that, perhaps, the most important phase of the athletic trainer's job is rehabilitation, the treatment of injury, the bringing back of full recovery of use of damaged knees, ankles, shoulders, wrists, muscles, etc. The subject of the athletic training budget is also mentioned. Cole believes that high school athletic trainers need a budget to carry on the functioning of the training duties. There would be no point in securing a well-qualified man and then to provide him with a very small and inadequate budget with which to work.

An article by Dolan<sup>21</sup> relates the history and function of the athletic trainer in the public high schools. The athletic training profession is described as ". . . the science of extreme and exceptional care rendered to members of athletic teams to prevent injury as the result of activity and to hasten healing of injuries that were sustained as the result of activity."<sup>22</sup> Dolan states that one of the most important actions that should be taken in upgrading the athletic programs in the schools is the hiring of an athletic trainer. This is emphasized for two reasons: the

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<sup>21</sup>Joseph P. Dolan, "The Athletic Trainer in High School," The Athletic Journal, XXXVII (September, 1956), 18, 89-90, 97-98.

<sup>22</sup>Ibid., p. 18.



coach will save invaluable time; and there will be increased care of the health and safety of the athletes. Dolan stresses the idea that one valuable aspect of having a high school athletic trainer is the importance of the athletic trainer's relationship with the team physician and the coach. He states, "The trainer is the eyes of the physician."<sup>23</sup>

Lankford,<sup>24</sup> in an article which deals with the high school coach's athletic training responsibilities, states that the head coach should designate an assistant coach to be responsible for the athletic training room. This man, the coach-athletic trainer combination, should keep a close check on injuries sustained during and after games or practices. He should also be responsible for keeping a medical file for all injuries and the treatment administered. Another duty of the athletic trainer would be to check with the head coach regarding the purchase of essential and necessary training room supplies and equipment.

Gunn's<sup>25</sup> article, concerning the Brazosport training program, emphasizes several points about the job of the high school athletic trainer. The athletic trainer provides constant and prolonged care of the many injuries that do not

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<sup>23</sup>Ibid., p. 98.

<sup>24</sup>Sam Lankford, "High School Coach's Training Responsibilities," Coach and Athlete, XVII (May, 1955), 16.

<sup>25</sup>Bobby Gunn, "Less Injuries with Brazosport Training Program," Coach and Athlete, XVI (June, 1954), 16-17.

require a doctor, yet need careful and patient attention to insure complete recovery. Other duties include: diet regulation and education, the teaching of health and hygiene, and working with the school nurses in overseeing the general health and welfare of all the students. The athletic trainer's duties include handling minor injuries to the general student body that require simple first aid. The athletic trainer also does any physical therapy treatments on students that are recommended and requested by a student's family physician.

Dolan,<sup>26</sup> in an article about the high school trainer, states that Bernie Moore, while coaching at Louisiana State University in the late 1930's, once stated, "I'd rather have a good team trainer than another good assistant coach."<sup>27</sup> Dolan indicates that the athletic trainer should be someone who will work with the team physician and should understand and honor the functions of the medical man by following the instructions and by reporting to the team physician on the physical condition of squad members.

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<sup>26</sup>Joseph P. Dolan, "The High School Trainer," Coach and Athlete, XVIII (June, 1956), 16-17, 19.

<sup>27</sup>Benny Moore, coach at Louisiana State University, cited in Joseph P. Dolan, "The High School Trainer," Coach and Athlete, XVIII (June, 1956), 16.

Federico<sup>28</sup> wrote an article concerning the need for an athletic trainer in high schools. He states that, from a coach's point of view, the athletic trainer is invaluable. The athletic trainer insures that the largest possible number of players will be ready for the contests. The athletic trainer is most important to the player himself. In the athletic trainer the players find someone they can trust and depend upon. The athletic trainer is more on the level of the players, yet respected for the position he holds.

O'Donoghue,<sup>29</sup> a noted orthopedic surgeon who works with athletics, discusses the relationship between the team physician and the athletic trainer. He states that the coach, athletic trainer, and physician work together, combined in one effective working unit designed to maintain the players in optimum physical and mental condition.

Clarke,<sup>30</sup> in the keynote address to the 1965 N.A.T.A. convention, expressed the idea that the transcending responsibility of the athletic trainer is the attunement of strategy and tactics in sports with the philosophy of sports. To be able to do this, the athletic trainer should have

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<sup>28</sup>Anthony Federico, "Need for an Athletic Trainer in High School," Coach and Athlete, XXIX (November, 1966), 18.

<sup>29</sup>Don H. O'Donoghue, "A Doctor Talks About Injuries to Athletes," Journal of Health, Physical Education, and Recreation, XXXI (November, 1960), 22-24.

<sup>30</sup>Kenneth S. Clarke, "The Trainer's Greatest Contribution," The Journal of the National Athletic Trainers Association (September, 1965), pp. 3-13.

confidence in which is considered the philosophy of sports, and should exercise judgment consistently while exploring a vast number of problems, utilizing a variety of concepts, bearing in mind an infinite number of subtle considerations, and electing between a wide army of "experts" for substantiation. Then the athletic trainer should attempt to impart this ability of judgment to the athletes.

Another outstanding physician, Allman,<sup>31</sup> presented a speech on the trends in athletic training and the problems of the future to the 1963 N.A.T.A. convention. At the conclusion of the speech he emphasized the fact that no one else had an opportunity to mold the bodies, minds, and ideals of youth as did the coaches and the athletic trainers. Contact of the athletic trainer with the boy was more intimate and more prolonged than that of anyone else outside the immediate family. He stated that those who were connected with athletics had a responsibility to youth to see that they have a feeling for their fellow man, a sincere belief in God, pride in the nation, and the self respect to try to do the best possible job at all times. According to Allman, athletic trainers should provide the necessary leadership, discipline, character, and love to make the youth of today the moral and physical leaders of tomorrow.

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<sup>31</sup>Fred L. Allman, "Trends in Athletic Training and Problems of the Future," The Journal of the National Athletic Trainers Association (February, 1964), pp. 2-8.

Several articles have been written for athletic periodicals which emphasize the role and responsibilities of the athletic trainer. McCloy<sup>32</sup> lists eleven sub-areas of athletic training. Two of the sub-areas are (1) responsibilities and limitations of the functions of the athletic trainer, and (2) cooperation between the athletic trainer, coach and team physician. Broussard<sup>33</sup> declares that the athletic trainer should be called an "athletic therapist." He states that the athletic trainer is a highly trained technician who has to be able to correctly diagnose an injury and prescribe the correct treatment. In addition to being an athletic trainer, this skilled technician should be a part-time psychologist. The athletic trainer should rehabilitate the mind of those athletes who, after injury, have become reluctant to exercise an injured part even after it has healed. Another article written to identify the role of the athletic trainers is one by Lankford.<sup>34</sup> The article emphasizes four areas concerning the role of the athletic trainer. First, the author lists fifteen ways in which a college athletic trainer can be of value to coaches and athletic teams.

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<sup>32</sup>C. H. McCloy, "What is Sports Medicine?" Journal of Health, Physical Education, and Recreation, XXXIX (January, 1958), 45-46, 48.

<sup>33</sup>Marty Broussard, "An Athletic Therapist--Today's Trainer," Coach and Athlete, XVII (November, 1954), 24-25.

<sup>34</sup>Sam Lankford, "The Athletic Trainer," Coach and Athlete, XVIII (October, 1955), 22, 26.

Second, three major values of an athletic trainer to a football team are mentioned: physical, mental and emotional, and administrative. The third topic of the article concerns the advantages of having an athletic trainer in the intramural physical education program. The last topic, and one of the most important roles mentioned, is the way in which athletic trainers can help by administering corrective exercises.

Brown has written several articles on the topic of athletic trainers. The first article<sup>35</sup> deals with the athletic trainer's approach to rationalization and mentions several points of importance. He states that the athletic trainer should know how to handle both emotional and physical problems of the athletes. The athletic trainer should know the practical application of the basic escape mechanisms used by an injured athlete. Brown also stresses that the athletic trainer should learn to apply common sense to the aches and pains encountered by the athlete under his charge. A second article by Brown<sup>36</sup> is concerned with the role of the athletic trainer in the athletic program. The article emphasizes the fact that the athletic trainer should set an excellent example for the school, the staff, and the athletes.

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<sup>35</sup> Joe Brown, "A Trainer's Approach to Rationalization," Coach and Athlete, XXVI (June, 1963), 14.

<sup>36</sup> Joe Brown, "The Trainer's Role in the Athletic Program," Coach and Athlete, XXVI (March, 1963), 30.

The athletic trainer's loyalty demands that he never "second guess" the coach, neither before the public, nor athletes. Brown quotes Robert Fennessy, Head Athletic Trainer for Los Angeles State College, when Fennessy summed up the athletic trainer's responsibilities with this statement:

. . . the trainer is the only real reliable way in which we can truly safeguard the health and safety of our athletes while they are participating in the athletic programs. He is necessary not only to protect the athletes' welfare, but is important in establishing within the students, coaching staff, and administration that the welfare of the individual is as important as his participation.<sup>37</sup>

In 1964 Brown<sup>38</sup> wrote an article on the topic of the athletic trainer's responsibility to the profession. The article stresses that the responsibilities of the athletic trainer are to maintain harmonious relationships with the coaching staff and to maintain the athlete's health. Concerning the responsibility of establishing harmony with the coaching staff, the athletic trainer should adhere to a particular area of responsibility. This includes loyalty, honesty, efficient work habits, up-to-date knowledge, ability to make on-the-spot decisions, administrative and organizational ability, resourcefulness, and flexibility.

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<sup>37</sup>Robert Fennessy, Head Trainer, Los Angeles State College, cited in Joe Brown, "The Trainer's Role in the Athletic Program," Coach and Athlete, XXIV (March, 1963), 30.

<sup>38</sup>Joe Brown, "The Trainer's Responsibility to His Profession," Coach and Athlete, XXVII (June, 1964), 20.

A recent article by Brown<sup>39</sup> deals with the athletic trainer's role in the mental attitude of the athletes. The athletic trainer should be aware that the athlete is subject to many of the same problems that are common to non-athletes. The athlete is predisposed to specific problems by participation in the athletic program. The athlete may have conflicts in academic work, personal relationships with the coach, or in the rationalization of problems the athlete encounters.

The role of the athletic trainer in baseball is the topic of an article by Cohen.<sup>40</sup> The athletic trainer should work to get the most out of the emotionally unstable individual. Cohen states that the athletic trainer is the psychological link between the coach and the players. The athletic trainer should also be a keen observer of ball players and should notice in the early stages when a player is on the verge of becoming "over-trained." If the athletic trainer conditions the man gradually, a great deal of trouble will be avoided later.

Quigley,<sup>41</sup> in a speech given to the American College Health Association, gave what was referred to as the athlete's "Bill of Rights." Any program of prevention of

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<sup>39</sup>Joe Brown, "The Trainer's Role in Mental Attitude," Coach and Athlete, XXIX (October, 1966), 14.

<sup>40</sup>Dick Cohen, "The Baseball Trainer," The Athletic Journal, XXX (April, 1950), 6, 52-53.

<sup>41</sup>Thomas B. Quigley, "Injuries Sustained in Sports--A National Problem," Student Medicine, VII (December, 1958), 122-125.



athletic injuries should start with the individual player and the following: (1) good coaching, (2) good equipment, and (3) good medical care. The third item mentioned was broken down into three major areas. First, there should be a thorough preseason history and physical examination of each player. Second, a doctor should be present on the playing field at every scrimmage and game. Third, the physician should have absolute and unquestioned authority in medical matters.

The first book written in the field of athletic training was one by Bilik<sup>42</sup> in 1916. He continuously revised this publication through the ninth edition which was released by the publisher in 1956. In this edition<sup>43</sup> Bilik does not list the responsibilities of the athletic trainer, but does state that the athletic trainer should bear in mind that an athletic trainer is not a physician. The athletic trainer has no moral right to take risks with the welfare of the athlete. It is the duty of the athletic trainer, when in doubt of ability to properly handle a case, to call the team physician immediately. There should be a good cooperation between the medical consultant and the athletic trainer if there is to be proper functioning of that particular phase of the athletic program.

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<sup>42</sup>S. E. Bilik, The Trainers Bible (New York, 1916).

<sup>43</sup>S. E. Bilik, The Trainers Bible, rev. ed. (New York, 1956), p. 22.

A textbook by Thorndike,<sup>44</sup> which has also had several editions, was written to review the history of the athletic training program at Harvard University and to give an account of the injuries occurring and the proper treatment given the injuries. Like Bilik, Thorndike does not elaborate on listing the duties of the athletic trainer. He does explain some functions of the athletic trainer for taking care of specific injuries. He states that since the coach is mainly interested in the many aspects of the team performance, it is essential for the coach to have assistance in the observation of the men for possible early or minor injury. An athletic trainer's services are indicated for this purpose along with the team physician.<sup>45</sup>

The duties of an athletic trainer comprise a chapter of a textbook written by Bevan.<sup>46</sup> He writes that the athletic trainer should have the responsibility of handling teams throughout an entire athletic trip, except for the pregame instruction and the direction during the contest. Like some of the writers previously referred to, he states that the athletic trainer's success depends on the cooperation of the coach. There should be a definite printed set of rules,

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<sup>44</sup>August Thorndike, Athletic Injuries, rev. ed. (Philadelphia, 1962).

<sup>45</sup>Ibid., p. 58.

<sup>46</sup>"Rollie" Bevan, The Athletic Trainer's Handbook (Englewood Cliffs, New Jersey, 1956), pp. 6-7.

which are presented to a squad at the beginning of a season, stating the practice and training schedule which is to be followed. In summarizing the chapter Bevan explains that the athletic trainer's definite duties and responsibilities are to know the physical condition of each boy, the work necessary to put the boy in shape and the uniforms and protective equipment necessary to enable the boy to give an all-out performance both in practice and in games.

Featherstone<sup>47</sup> points out several significant duties and roles practiced by the athletic trainer. He states that the athletic trainer should have no favorites and should make the team respect him and judgments made by the athletic trainer. The athletic trainer should instruct athletes to report all injuries however minor. He states that it should be the duty of the athletic trainer to insure that three factors are present when dealing with athletes. First, the athletes should be adequately trained to a state of maximum physical fitness and this standard should be maintained throughout the season. Second, all steps should be taken to prevent injuries both in training and during actual contests. If injuries occur, the athletic trainer should have sufficient knowledge to treat the injuries correctly and safely. Third, the athletic trainer insures that no athlete plays until 100 per cent recuperated after an injury.

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<sup>47</sup> Donald F. Featherstone, Sports Injuries Manual for Trainers and Coaches (New York, 1956), pp. 40, 62.

Morehouse and Rasch<sup>48</sup> list twelve responsibilities of the athletic trainer. They are summarized below. The athletic trainer (1) observes all athletes for symptoms that suggest referral to the team physician, (2) administers first aid to all injured players, (3) uses taping, bandaging, and other protective techniques to prevent injuries or recurrence of injuries, (4) restores injured players to competition through the use of physical therapy and corrective therapy under the direction of the team physician, (5) carries out all instructions given by the team physician, (6) maintains records of injuries, treatments, and outcome of treatments, (7) supervises conditioning exercises if desired by coach, (8) maintains and operates the athletic training quarters, (9) assures that emergency equipment is at the scene of competition, (10) supervises and trains student assistants, (11) helps prevent the spread of infectious diseases, and (12) provides ego-support for the athletes.<sup>49</sup>

Dayton<sup>50</sup> devotes the entire first chapter of his book to the athletic trainer and duties of the athletic trainer. According to Dayton, there are three basic categories in which the athletic trainer's duties fall: prevention of

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<sup>48</sup>Laurence E. Morehouse and Philip J. Rasch, Sports Medicine for Trainers, rev. ed. (Philadelphia, 1963).

<sup>49</sup>Ibid., pp. 131-132.

<sup>50</sup>Oliver W. Dayton, Athletic Training and Conditioning (New York, 1960), pp. 6-10.

injuries to athletes; treatment given to injuries; and rehabilitation given an injury. On the topic of accident prevention, he stresses that attention should be given to the preseason physical examination, equipment, condition of the facilities including athletic fields, protective strapping, and proper warm-up prior to practice or competition. Concerning the treatment of injuries, he stresses the fact that the athletic trainer and the team physician should work together in the treatment of injuries. The athletic trainer performs many of the treatments to injuries, but this must be done in accord with the instructions of the physician. Any medication taken orally should be ordered by the team physician or the school health department. On the final category of rehabilitation of injuries, the author emphasizes that the athletic trainer should not allow an athlete who is not completely rehabilitated to return to activity. Exercises for atrophied parts of the body should be continued until full recovery has been attained.

Ryan,<sup>51</sup> in his book, which emphasizes the role of the team physician, explains that the athletic trainer should give advice to the team physician when asked. He states that the athletic trainer should be responsible only to the institution and work under the supervision of the team physician at all times. Many of the athletic trainer's

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<sup>51</sup>Allan J. Ryan, Medical Care of the Athlete (New York, 1962), pp. 9-12.

functions are performed under standing orders, but any variation from standard procedures require the direct order of the team physician. An item mentioned that has not been brought out by other authors is that the athletic trainer should be alert to the possibility of self-medication by the athletes.

Matthews and Thompson<sup>52</sup> state that the modern athletic trainer's responsibilities revolve around two main areas. The first of these is the prevention of injuries while the second is the care or treatment of injuries. The authors conclude that it is sometimes difficult to determine which of these areas receives more of the attention of the athletic trainer. Since the athletic trainer may spend hours taping ankles, constructing prevention devices and fitting mouth protectors, it may well equal the many hours spent in the actual treatment of injuries.

Dolan,<sup>53</sup> in the first edition of his book, utilizes the first chapter to explain the function, qualities, and professional preparation of the athletic trainer. In writing about ethics and the athletic trainer's role, Dolan states that the athletic trainer should follow the directions of the team physician and should never adopt procedures that

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<sup>52</sup>David O. Matthews and Richard A. Thompson, Athletic Injuries (Dubuque, Iowa, 1963), p. 2.

<sup>53</sup>Joseph P. Dolan, Treatment and Prevention of Athletic Injuries (Danville, Illinois, 1955), pp. 27-28.

have been invested in the powers of the physician, such as the use of drugs and narcotics. If the athletic trainer violates the confidence of the team physician, action should be taken to see that he does not remain a member of the school's faculty. The athletic trainer is in a rare position to observe preparation for coming contests. The athletic trainer must work with the coaching staff and never try to "second guess" the coaches. A third idea brought out by Dolan is that the athletic trainer should be exact in the treatment and diagnosis of injuries. He should never "try to bluff" his way when talking with athletes. If this does occur, in time, the athletes will discover the athletic trainer's tactics and lose faith in his ability and reliability. In the third edition, Dolan<sup>54</sup> emphasizes the psychological aspects and techniques used in athletic training. The athletic trainer must use these techniques at the right time and place. By approaching the athlete with sound advice and treatment, the athletic trainer can get rewarding results from his actions. The athletic trainer must understand the whole athlete, both mental and emotional, as well as physical.

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<sup>54</sup> Joseph P. Dolan and Lloyd J. Hollaway, Treatment and Prevention of Athletic Injuries, rev. ed. (Danville, Illinois, 1967), pp. 409-447.

Klafs and Arnheim<sup>55</sup> list nine duties of the athletic trainer. They note that the athletic trainer's responsibilities are varied and are not confined to emergency first aid treatment and rehabilitation alone. The nine duties are

- (1) Working cooperatively with the coaches in setting up and carrying out a program of conditioning for athletes;
- (2) Administering first aid to injured athletes on the field, in the gymnasium, or in the training room;
- (3) Applying protective or injury-preventive devices, such as strapping, bandaging, or braces;
- (4) Working cooperatively with and under the direction of the physician in respect to:
  - a. Reconditioning procedures
  - b. Operation of therapeutic devices and equipment
  - c. Fitting of braces, guards, and other devices
  - d. Referrals to the physician, health services, or hospital;
- (5) Working cooperatively with the coaches and the physician in selecting protective athletic equipment and gear and in checking it for safety;
- (6) Supervising the training room, which includes the requisitioning and storage of supplies and equipment, keeping adequate records, maintaining a standing and running inventory, and maintaining an annual budget;
- (7) Supervising, and, when necessary, instructing assistant trainers and other staff members under his jurisdiction;
- (8) Counseling and advising athletes and coaches on matters pertaining to conditioning and training, such as diet, rest, reconditioning, etc.;
- (9) Conducting himself at all times as a responsible professional person.<sup>56</sup>

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<sup>55</sup> Carl E. Klafs and Daniel D. Arnheim, Modern Principles of Athletic Training (St. Louis, 1963), p. 28.

<sup>56</sup> Ibid.



In summary of the review of the literature on the role of the athletic trainer it can be said that the duties are varied, yet all can be encompassed under the area of caring for the athlete's health whether it be prevention, care of injuries, or rehabilitation of injuries. The authors reviewed agree on many of these functions while each had some of his own ideas added to the general listing. The Athletic Trainer's Code<sup>57</sup> characterizes the role of the athletic trainer:

T-ell the team physician promptly about all cases in injury and illness.

R-ender first aid when the physician is not immediately available and then contact him or, if serious, call the hospital.

A-rrange for medical coverage before the game when playing abroad without the team physician.

I-nstitute the therapy the team physician prescribes but if you feel something else would be better, discuss it with him.

N-ever overdo when giving first aid as it may confuse and complicate the picture.

E-xcusing players from practice for medical reasons should be the function of the team physician, either directly, or indirectly through a previous arrangement with the trainer.

R-emember the medical training staff is a part of the general coaching staff and must give full cooperation for the welfare of the total job.

C-ultivate a friendly and courteous but firm and business-like attitude in dealing with athletes.

O-verall cleanliness of person and quarters is paramount.

D-iscourage any attempt of a player who is trying to gain sympathy over some pet "gripe" he has carried from the field.

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<sup>57</sup> Athletic and Medical Section, Princeton University, "The Athletic Trainer's Code," The Athletic Journal, XXXIV (April, 1954), 15.

Encourage injured men to see the physician daily or as often as you feel they should, and if they do not comply, refuse to treat them.<sup>58</sup>

#### The Undergraduate and Practical Experience of the Athletic Trainer

This section reviews literature found identifying the academic and practical experience desired in the professional preparation of the athletic trainer. Topics reviewed were taken from studies, reports, articles, books, and college and university bulletins. Much of the literature previously mentioned was re-examined for possible information which could be included under this topic.

A study by McLaughlin<sup>59</sup> sampled 100 high schools in the United States. Thirteen per cent of the schools reporting had a full time athletic trainer or someone who was in charge of the athletic training. Of the 100 schools sampled, 80 per cent of the administrators indicated a favorable reaction toward hiring someone who could teach an academic subject and who could also supervise the training room.

An investigation by Cole<sup>60</sup> reported that the courses taken by persons treating athletic injuries in the secondary schools of Rhode Island were typical of those taken by the

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<sup>58</sup> Ibid.

<sup>59</sup> McLaughlin, op. cit.

<sup>60</sup> Richard K. Cole, "A Study of the Care and Prevention of Athletic Injuries in the Secondary Schools of Rhode Island," unpublished master's thesis, School of Education, University of Rhode Island, Kingston, Rhode Island, 1955, p. 42.

average coach. Out of thirty-three replies, twenty-four of the respondees had previously taken a course in first aid; fourteen had taken a course in the care and prevention of athletic injuries; six had taken a course in physiology; six had taken a course in anatomy; five had taken a course in nursing; four had taken a course in correctives; one had taken a course in physiotherapy; and, one had taken a course in pharmacy.

Slaughter,<sup>61</sup> in his investigation of the athletic trainers in the high schools in New England, found only twenty-one athletic trainers in the 169 schools surveyed. He noted that the following individuals were responsible for first aid treatment of injuries occurring during practice sessions at the schools: coaches of the sports, assistant coaches, physical education directors, physical education teachers, academic teachers, team physicians, and building custodians.

In a survey conducted by Blank<sup>62</sup> in 1955, it was noted that out of the 410 colleges and universities investigated, 222 of the schools had a course which emphasized the prevention and treatment of athletic injuries. The course was usually included in the curriculum for preparing male

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<sup>61</sup>Slaughter, op. cit., p. 21.

<sup>62</sup>Lane B. Blank, "Professional Courses in the Prevention and Treatment of Athletic Injuries at American Universities and Colleges," Research Quarterly, XXVI (October, 1955), 363.

students in physical education at the colleges and universities. Only thirteen of the institutions had two such courses that were offered. The course in athletic injuries was required for the attainment of a bachelor degree and/or teaching credentials in physical education at the majority of the institutions reporting. The study of the prevention, care, and treatment of athletic injuries ranked the highest in regard to the amount of class time involved. The most popular items of subject matter, suggested by respondents, for future inclusion in courses of athletic injuries were: nutrition, the specifics of treatment, physical therapy, and a review of the basic sciences.

A study was undertaken by Westen<sup>63</sup> of the public schools in Illinois. Out of the 298 responses, only 18, or 6 per cent, of the schools had a full time athletic trainer. Twenty-eight schools, or 9 per cent, had some part-time adult help in the athletic training room while in 47 schools, or 16 per cent, students were used to care for the injured athletes.

Rader<sup>64</sup> surveyed the public schools in Illinois and determined practices that pertained to medical care and

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<sup>63</sup>Brodie C. Westen, "The Current Status of Corrective Physical Education and Athletic Training in the Public Schools of Illinois," unpublished master's thesis, School of Physical Education, University of Illinois, Urbana, Illinois, 1960, p. 35.

<sup>64</sup>Rader, op. cit., pp. 54-55.

insurance coverage of the high school athletes. The study revealed that a member of the school staff, qualified by experience or training, served as the athletic trainer for 69-3/10 per cent of the high schools. Rader recommended that the person in charge of the athletic training room should be competent in first aid and thoroughly informed in sports conditioning and training.

When Peck<sup>65</sup> conducted a questionnaire survey of the secondary schools of Rhode Island, only two of the thirty-three schools responded as having an athletic trainer. Most of the schools were reported as giving this responsibility to the coaches. In concluding the report, Peck stated, "It might very well be that the persons responsible for the disposition of athletic injury bills feel that the injury problem in Rhode Island is well taken care of and that the schools therefore, do not have a need for athletic trainers and training rooms."<sup>66</sup>

A study by Cochell,<sup>67</sup> of the junior colleges of California, determined the preparation of the athletic trainers who served the schools. The results revealed that out of the thirty-one athletic trainers who responded, five had completed the doctoral degree while eight held a master's degree.

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<sup>65</sup>Peck, op. cit., pp. 50-52.

<sup>66</sup>Ibid., p. 6 of abstract.

<sup>67</sup>Cochell, op. cit., p. 18.

Johnson and Newell<sup>68</sup> observed the following pertinent information concerning college or university experience when they surveyed members of the N.A.T.A. Pertaining to the amount of formal education obtained by the athletic trainers who responded, 35 per cent had Bachelor of Science degrees; 33 per cent had Master of Science degrees; 5 per cent had a Bachelor of Science degree plus a physical therapy degree or certificate; 4 per cent had a Master of Science degree plus a physical therapy degree or certificate; and 1 per cent had a Doctor of Philosophy degree. The remaining 22 per cent of the athletic trainers had no degree of any type. In addition to these findings, the survey revealed that beyond the formal education obtained by the athletic trainers, 11 per cent of the men had attended specialized therapeutic courses, 37 per cent had attended various athletic training courses or clinics, and 18 per cent had attended both of the above courses.

One of the most recent studies conducted concerning the professional preparation of the athletic trainers was a survey of the members of Districts One and Two of the N.A.T.A. on the eastern seaboard of the United States. Soderberg<sup>69</sup> reported that, out of the seventy-one questionnaires returned, twelve of the athletic trainers had only a high

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<sup>68</sup>Johnson and Newell, op. cit., p. 17.

<sup>69</sup>Gary L. Soderberg, "On Becoming an Athletic Trainer," unpublished study, Eastern Athletic Trainers Association, East Stroudsburg State College, East Stroudsburg, Pennsylvania, 1967, pp. 1-5.

school diploma or equivalent. Thirty-one of the athletic trainers had bachelor degrees in physical education, while three had bachelor degrees in physical therapy. Sixteen were found to have master's degrees and seven had certificates in physical therapy. The study revealed that the majority of the athletic trainers suggested that the minimal educational background for qualification in the athletic training profession should be a bachelor's degree in physical education. Twenty-two athletic trainers indicated a need for specialized schools or curriculums with a degree in athletic training, and sixteen suggested that a physical therapy degree or certificate be required. Most of the individuals responding to the questionnaire thought that certification or licensure of athletic trainers should be established by an organization other than the N.A.T.A. The respondees indicated that an athletic training curriculum needed to be developed in schools offering majors in health and physical education. This was the first study reviewed which indicated a practical experience preparation for athletic trainers. Soderberg's findings suggested a minimum of two years of experience before being certified. He also observed opinions of the possibility of some experience superseding education and hospital experience. Pertaining to the number of years of part-time experience as a student trainer under the supervision of a member of the N.A.T.A., only four of the respondents recommended four years of

experience, while two stated one year would be necessary to gain the experience. Twenty-seven answered that no experience requirement was necessary. He concluded that the responses indicated that the experience requirement, as advocated by some, was not particularly important.

Another recent survey of the members of the N.A.T.A. pertained to a certificate program in physical therapy.<sup>70</sup> In the questionnaire sent by the Executive Secretary of the N.A.T.A., members of the Association indicated whether or not they were interested in obtaining a certificate in physical therapy. This was to be accomplished by attending a certificate program in four summer sessions. The majority of the membership was interested and wanted to obtain more information on the program as soon as it could be obtained. No other information had materialized on this subject at the time of this writing.

In a survey of the status of team physicians in the United States, Ryan<sup>71</sup> noted that, although the majority, 85 per cent, of the N.C.A.A. colleges employed athletic trainers, only 35 per cent of the N.A.I.A. colleges hired athletic trainers. He concluded that the difficulties of operating an athletic program with no athletic trainer

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<sup>70</sup>National Athletic Trainers Association, Certificate Program in Physical Therapy, A Report on a Certificate Program in Physical Therapy (Lafayette, Indiana, 1967), pp. 1-19.

<sup>71</sup>Ryan, op. cit.



placed a heavy burden on the coaches at those institutions. It was also concluded that there was a great shortage of qualified athletic trainers in the United States and that this was the main cause of the deficiency of athletic trainers in the N.A.I.A. colleges.

A study was conducted by Graham<sup>72</sup> of the athletic training programs in the small colleges in the United States. Of the 223 responses, 112 were received from athletic trainers. The remainder of the schools did not employ athletic trainers. One of the purposes of the study was to determine the educational background of the athletic trainers at the small college level. Conclusions revealed that 94 per cent of the athletic trainers were high school graduates, and 81 per cent were college graduates, with 52 per cent having received advanced degrees. Five per cent of the athletic trainers had a doctoral degree. The majority of the athletic trainers who responded had educational backgrounds in physical education or physical therapy. But only 26 per cent were certified physical therapists, and less than 10 per cent had both physical education and physical therapy educational backgrounds. Twelve respondents had worked as student athletic trainers while in high school. Fifty-three respondents had worked as student athletic trainers on the collegiate level.

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<sup>72</sup>Gordon L. Graham, "An Investigation of the Professional Qualifications of Athletic Trainers at the Small College Level," unpublished master's thesis, Graduate School, Mankato State College, Mankato, Minnesota, 1963, pp. 3, 46.

Graham pointed out that varsity athletic participation at the college or university level was indicated by 70 per cent of the responding athletic trainers with a composite total of twelve sports.

A job analysis of college athletic trainers by Burnett<sup>73</sup> revealed that 88 per cent of the athletic trainers surveyed had bachelor's degrees. Twenty-four of the athletic trainers had only a high school education. This study also revealed that slightly more than half of the athletic trainers were physical education majors. Twenty-eight of the athletic trainers responding had served as assistant college athletic trainers before becoming head athletic trainers.

Kennedy<sup>74</sup> conducted an analysis of the status of the athletic trainer in the senior colleges and universities of California. One of the sub-problems of the study was to determine the amount of training and preparation of athletic trainers of California possessed in the field of athletic training. Of the twenty-eight schools responding, only fourteen had full-time athletic trainers. The remaining questionnaires were answered by athletic directors. Most of the athletic trainers held the Bachelor of Arts and physical therapy degrees. All of the fourteen athletic trainers reported having taken special courses in physical therapy

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<sup>73</sup>Burnett, op. cit., pp. 15-71.

<sup>74</sup>Kennedy, op. cit., pp. 2, 24-28.

and courses in the care and prevention of athletic injuries. An interesting note was that, in 25 per cent of the twenty-eight schools, the athletic directors felt that no specialized training or definite educational level was necessary for an athletic trainer. Six of the athletic directors did not consider the position of athletic trainer as a faculty position.

Railey<sup>75</sup> examined college coaches to analyze the coach and athletic trainer relationship. In regard to the professional preparation of the head athletic trainer, 97 per cent of the coaches were of the opinion that the head athletic trainer was properly prepared to carry out all duties and responsibilities. Therefore, only 3 per cent of the coaches felt that the head athletic trainer was not properly prepared.

Johnson<sup>76</sup> surveyed college and university athletic trainers. One purpose of the survey was to determine the degree of athletic training and teaching experience of the athletic trainers. Another purpose was to analyze the professional status of the athletic trainers. Forty-seven per cent of the athletic trainers had a master's degree, and 3 per cent of the athletic trainers had a doctoral degree. The remaining 17 per cent were divided between having bachelor's

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<sup>75</sup>Railey, op. cit.

<sup>76</sup>Johnson, op. cit., pp. 54-58.

degrees plus a physical therapy certificate, having master's degrees plus physical therapy certificates, and having no degree.

In the only doctoral level study found on this subject, Dolan<sup>77</sup> recommended that there be a recognition of the need for obtaining standardly trained intercollegiate athletic trainers to cope with the rising tide of athletic injuries. He emphasized the need for a possible one-year graduate course for training in the field of prophylaxis and cure of injuries sustained, or predicted to be sustained, through participation in intercollegiate athletics. He suggested the following prerequisites and guidelines to the graduate program:

A. Graduation from an approved school of physical education having completed required courses in the following: sciences, physics, chemistry, mammalian and gross anatomy, physiology, psychology, methods of educational research, personal and community hygiene, kinesiology, diet, foods, and textiles.

B. Broad experiences in skills of recreation and physical education.

C. To be required in the Graduate Program:

1. Physical Therapy Procedures:

- a. Hydrotherapy
- b. Electrotherapy
- c. Therapeutic exercise
- d. Muscle and sensory testing
- e. Fever therapy

2. Applied Physical Therapy:

- a. Medicine
- b. Neurology

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<sup>77</sup>Joseph P. Dolan, "Current Prophylactic and Therapeutic Problems in Intercollegiate Football," unpublished doctoral dissertation, Graduate Division, University of North Dakota, Grand Forks, North Dakota, 1948, pp. 323-333.

- c. Psychiatry
- d. Physical Medicine seminar
- e. Anatomy and Physiology of Exercise
- 3. Miscellaneous:
  - a. Pathology
  - b. X-ray
  - c. Bandaging
  - d. Aseptic and Isolation techniques
  - e. Occupational therapy
  - f. Clinical observation
  - g. Social aspects of medicine
  - h. Clinical practice (1,000 hrs.)
  - i. Photography<sup>78</sup>

During the past eighteen years many periodicals have published articles concerning the athletic trainer. The majority of these deal with athletic injuries and how to treat and rehabilitate the injuries. Several articles have appeared which discuss, either in length or in short statements, the professional preparation background desired or achieved by athletic trainers.

Cohen<sup>79</sup> describes the education needed for the baseball athletic trainer. He believes that the athletic trainer is the psychological link between the manager and the player. He states that circumstances may arise where knowledge of human behavior proves to be the athletic trainer's most valuable asset. Cohen concludes with the recommendation that the athletic trainer have a thorough knowledge of first aid, protective bandaging, and taping. Stretching exercises for all parts of the body and for all types of activities involved are also mentioned as a significant part of the

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<sup>78</sup> Ibid.

<sup>79</sup> Cohen, op. cit.

athletic trainer's education. Cohen also concluded that the athletic trainer who has a good background in anatomy, physiology, and physics, and an imagination and ingenuity with which to temper his education and experience, can devise bandages, equipment and protective apparatus to fit any unusual circumstances which might arise.

In an article by Cole,<sup>80</sup> which describes the athletic trainer in the secondary schools, there appears an important conclusion that should be emphasized when discussing the professional preparation of the athletic trainer. He believes that the day will come in the near future when all candidates for athletic training openings will be required to pass a very comprehensive examination which is devised and evaluated by physicians and athletic trainers. It is important to note that this article was written by Cole fourteen years ago. Another article by Cole<sup>81</sup> describes the typical athletic trainer. He states that, the majority of the time, the athletic trainer is an ex-athlete, a college graduate, holds a master's degree and possibly is a registered physiotherapist. The athletic trainer usually has a rich background of experience in supporting, protecting, and rehabilitating many athletes over a period of time.

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<sup>80</sup>Richard K. Cole, "Part One--The Athletic Trainer in Secondary Schools," The Athletic Journal, XXXIV (March, 1954), 22, 66.

<sup>81</sup>Richard K. Cole, "Part Two--The Athletic Trainer in Secondary Schools," The Athletic Journal, XXXIV (April, 1954), 15, 49-53.

Two articles by Dolan, that deal with the high school athletic trainer, give several ideas which need to be considered when mentioning the education of an athletic trainer. Dolan<sup>82</sup> mentions, in the first article, that a course in the care and prevention of athletic injuries should isolate learnings in anatomy, kinesiology, physiology, and first aid. He states that many colleges and universities in the nation are turning out well qualified young men as athletic trainers who not only have a major in physical education, but have worked four years in a college athletic training room while using the finest of training and conditioning equipment. According to Dolan, some of the best teaching on any campus is done by the athletic trainers. The teaching is backed up with one of the few laboratory experiences that is real, as well as laboratory work. In the second article, Dolan<sup>83</sup> states that today's athletic training graduates usually have studied anatomy, physiology, kinesiology, corrective exercise, and usually have had a sound course in the care and treatment of athletic injuries.

As in the above section concerning the role of the athletic trainer, Brown was instrumental in writing about the education desired of the athletic trainer. In the

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<sup>82</sup>Joseph P. Dolan, "The High School Trainer," Coach and Athlete, XVIII (June, 1956), 16-17.

<sup>83</sup>Joseph P. Dolan, "The Athletic Trainer in High School," The Athletic Journal, XXXVII (September, 1956), 18.

article about the athletic trainer's role in the athletic program, Brown<sup>84</sup> notes that the educational preparation for injury care should include a study of psychology, physiology, kinesiology, conditioning, diet, hygiene, therapeutic exercise, and uses of physical therapy. This is emphasized so that the athletic trainer will have a sound understanding of the human body. In Brown's<sup>85</sup> article about the athletic trainer's approach to rationalization, he mentions that the athletic trainer should be familiar with the practical application of the basic escape mechanisms used by an injured athlete. Brown<sup>86</sup> also wrote an article concerning the athletic trainer's responsibility to the profession. In the article, Brown states that an athletic trainer should acquire strong beliefs and firm convictions from a study of the human body, and then should act on the basis of these beliefs in meeting all responsibilities.

Three associations, the American Association for Health, Physical Education, and Recreation (A.A.H.P.E.R.), the American Medical Association (A.M.A.), and the National Athletic Trainers Association (N.A.T.A.) have played important parts in recommending minimum competencies desired of athletic

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<sup>84</sup>Joe Brown, "The Trainer's Role in the Athletic Program," Coach and Athlete, XXVI (March, 1963), 30.

<sup>85</sup>Joe Brown, "A Trainer's Approach to Rationalization," Coach and Athlete, XXVI (June, 1963), 14.

<sup>86</sup>Joe Brown, "The Trainer's Responsibility to His Profession," Coach and Athlete, XXVII (June, 1964), 20.



trainers. In the report of the 1962 National Conference of Professional Preparation of the A.A.H.P.E.R.<sup>87</sup> guidelines for the preparation of athletic trainers were stated. The conference believed that, in order to upgrade the athletic programs in the nation's schools, it was essential for all athletic trainers not only to have had actual experience in athletics but also to have had some specific professional education which would qualify the athletic trainers to care for interscholastic and intercollegiate athletic teams. The courses suggested to insure adequate preparation included the following: basic biological science, growth and development, anatomy and physiology, personal health and nutrition, safety and accident prevention specific to activity areas, first aid, athletic training and conditioning, theory and practice in coaching various sports, and principles and administration of physical education and athletics. These areas were to be supplemented by both a preparation in theory and a laboratory practicum in advanced techniques of athletic training. The conference members stated that the student who planned to have a career as an athletic trainer should have a physical education or health major, an adequate preparation in the basic sciences, and additional preparation for certification from an approved school of physical therapy.

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<sup>87</sup> American Association for Health, Physical Education and Recreation, Professional Preparation in Health, Physical Education, and Recreation (Washington, D.C., 1962), pp. 70-72.

In addition to the above general qualities and competencies of an athletic trainer, a person who assumed athletic training responsibilities in schools should have knowledges and understandings, skills, and abilities appropriate to the specialty of athletic training. Knowledges and understandings should be acquired of

(1) The relationship of physical education, including athletics, to the purposes and objectives of education and the fundamental inter-relatedness of the physical education program, the intramural program, and the interscholastic activities program.

(2) Desirable procedures in squad management or organization.

(3) The responsibility of interscholastic athletics in achieving the objectives of the total school-community health program.

(4) Extensive technical information in the chosen specialty, including coaching techniques.

(5) The best methods of developing, training, and conditioning athletes.

(6) Legal responsibilities peculiar to athletics.

(7) The social values inherent to interschool athletic situation.

(8) The relationship of the coach and the athletic trainer to the physician.

(9) The responsibility of the coach and athletic trainer for rehabilitation under medical supervision.<sup>88</sup>

The conference stated that the athletic trainer must have skills and abilities in

(1) Interpretation and application to interschool athletics of national, state, and local policies, rules, and regulations.

(2) Planning and supervision of athletic facilities.

(3) Administration of appropriate budgets, maintenance of adequate records, purchase and

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<sup>88</sup> Ibid., pp. 71-72.

care of equipment, arrangement of schedules, preparation of contracts, and management of athletic contests.

(4) Athletic training and conditioning procedures.

(5) Interpretation of the school athletic program through effective speaking and writing.

(6) Maintenance of emotional control under the unusual pressures connected with athletics.

(7) Administration of an effective intramural program.<sup>89</sup>

The second association, the A.M.A., has in recent years recognized the N.A.T.A. for continued advancement in professional standards and professional preparation. In 1965, the A.M.A.'s Committee on the Medical Aspects of Sports stated, in a letter to William E. Newell, Executive Secretary of the N.A.T.A., that rapport between the A.M.A. and N.A.T.A. should be developed and encouraged.<sup>90</sup> The committee indicated support of the N.A.T.A. efforts to upgrade standards for athletic trainers and to generally bring about professional advancement of athletic trainers. In 1967, the committee expressed support of the N.A.T.A.'s efforts to bring about professional advancements of the members and to encourage improvement of health policies and practices in athletics.<sup>91</sup> The committee strongly supported the N.A.T.A.'s

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<sup>89</sup> Ibid., p. 72.

<sup>90</sup> Letter from Fred V. Hein, Secretary, Committee on the Medical Aspects of Sports, A.M.A., to William E. Newell, Executive Secretary, N.A.T.A., September 10, 1965.

<sup>91</sup> American Medical Association, Professional Standards of Athletic Trainers, Report of the Board of Trustees (Atlantic City, 1967), pp. 1-2.

recommendation that all athletic teams should have the benefit of a professionally prepared athletic trainer as part of the medical supervisory team. Also stated was that the committee was always ready to supply consultation to the N.A.T.A. members on matters of mutual interest and concern.

In 1955, the N.A.T.A. made an effort to raise professional standards of athletic training.<sup>92</sup> In doing so, a program of athletic training preparation was approved. The program included a major study in physical education with additional courses required by the states for a teaching license. The program also included the prerequisites for entry into schools of physical therapy as suggested by the American Physical Therapy Association. The basic minimal requirements of the program as recommended by the N.A.T.A. were

- I. A major study including teaching license in physical education and/or health variable, by states.
  - A. Total of 24 semester hours in laboratory, physical, biological, and social sciences.
    1. Biology--zoology (anatomy and physiology) . . . . . 8 hrs.
    2. Physics and/or chemistry . . . 6 hrs.
    3. Social sciences (at least 6 hrs in psychology) . . . . . 10 hrs.
  - B. Electives strongly advised
    1. Additional biological and social sciences
    2. Physical education, such as group activities, dancing, etc.

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<sup>92</sup>National Athletic Trainers Association, An Athletic Training Program, A Report on the Professional Preparation of the Athletic Trainer (Lafayette, Indiana, 1955), pp. 1-4.

3. Hygiene
  4. Speech
- II. Specific required courses (if not included in I--these must be added)
- A. Anatomy
    1. One or more courses which will include human anatomy
  - B. Physiology
    1. Circulation, respiration, digestion, excretion, nerve, brain and sense organs
  - C. Physiology of exercise
  - D. Applied anatomy and kinesiology
    1. The muscles; emphasis on their function in and development for specific activities
  - E. Laboratory physical science
    1. Six semester hours in physics and/or chemistry
      - a. Include principles of chemistry
  - F. Psychology
    1. Six semester hours
      - a. Including personality, intelligence, emotion, memory, thinking, attention, perception, learning.
  - G. Coaching techniques (9 semester hours)
    1. Include football, basketball, track
    2. Recommend baseball, soccer, wrestling, plus preferred sports by geographic areas.
  - H. First Aid and Safety
    1. Minimum of Red Cross First Aid
  - I. Nutrition and Foods
    1. Basic principles of nutrition.
    2. Basic diet and special diet
  - J. Remedial exercise
    1. Exercise for a typical and/or both temporary and permanent handicaps
  - K. Organization and administration of health and physical education programs
  - L. Personal and community hygiene
  - M. Techniques of athletic training
    1. Basic, general course (acceptable course for all coaches)
  - N. Advanced techniques of athletic training
    1. Special course for athletic training candidates with full academic background
  - O. Laboratory practices (6 semester hours credit or equivalent work)

- III. Recommended Courses
  - A. General physics
  - B. Pharmacology
    - 1. Specific side effects of drugs
  - C. Histology
    - 1. Tissues and methods of studying them
  - D. Pathology
    - 1. Laboratory study of tissues in pathological condition<sup>93</sup>

Between 1955 and 1967, the N.A.T.A. membership expressed much misunderstanding concerning the educational future of the athletic trainer. Therefore, some misunderstanding also occurred about the above minimal requirements as adopted by the Association. To help rectify these circumstances, the Board of Directors of the N.A.T.A., in 1967, decided to let the membership re-examine and decide whether or not the educational recommendations were still in accord with the majority of the active membership.<sup>94</sup> The results of the study were not determined at the time of this writing.

Two individuals, who were members of the N.A.T.A., expressed views on the above problem through the media of letters to the editor of the N.A.T.A. Journal. Gunn,<sup>95</sup> Chairman of the Board of Directors, N.A.T.A., stated that it

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<sup>93</sup> Ibid., pp. 3-4.

<sup>94</sup> National Athletic Trainers Association, Re-examination of Professional Preparation of the Athletic Trainer, Report from the Board of Directors (Lafayette, Indiana, 1967), pp. 1-2.

<sup>95</sup> Letter from Bobby Gunn, Chairman, Board of Directors, N.A.T.A., cited in Journal of the National Athletic Trainers Association (Summer, 1967), p. 16.

was the duty of the N.A.T.A. to provide rules, regulations, and opportunities for qualification or certification that would be recognized and accepted nationally. He believed that there may be a future need for a nationwide qualifying or certifying examination of athletic trainers. A future need of post-graduate short-term courses that would enhance the position and accreditation of the certified athletic trainer was also mentioned. Gunn recognized that there were many possible avenues of growth in the future; but, at the present time, the proposed standards for certification, as stated above, seemed to be the most workable. He believed that the undergraduate professional preparation of the student trainer should include at least two years, or approximately 1800 hours, of work under the direct supervision of a certified athletic trainer.

Another letter to the editor of the N.A.T.A. Journal was written by Gieck.<sup>96</sup> The purpose of the letter was to make known feelings on the matter of certification of athletic trainers. First of all, Gieck did not believe that a degree in physical therapy was the whole answer to the problem. Nor did he think a specific degree was the answer. He stated that all professions should govern themselves from within and have a basis of certification if the profession

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<sup>96</sup>Letter from Joe Gieck, Athletic Trainer, University of Virginia, Charlottesville, Virginia, cited in Journal of the National Athletic Trainers Association (Summer, 1967), pp. 16-17.

was to survive and be recognized as truly professional. The letter closed with a criticism of those N.A.T.A. members who sat back and did nothing but were the loudest critics of whatever ideas were proposed.

About every textbook written on the topic of athletic training has at least some statements concerning the professional preparation needed by the athletic trainer. The first book written for athletic training was by Bilik.<sup>97</sup> According to Bilik, there are too many outstanding colleges and universities ". . . who employ as trainers ignorant nincompoops-- a disgrace to the school and a peril to the youngsters entrusted to their care."<sup>98</sup> He suggests that, although the above cases do exist, most of the modern athletic trainers are college graduates with a major in physical education or in physical therapy. Most athletic trainers are thoroughly versed in conditioning, selection and care of protective equipment, bandaging, diet, psychology, physical therapy, and first aid of common athletic injuries. During the undergraduate years many of these men serve as assistant athletic trainers, thereby gaining valuable experience. He believes that no one should be in charge of athletic activities until he qualifies for the responsibilities by acquiring a thorough knowledge of anatomy, physiology, physiology of exercise,

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<sup>97</sup>S. E. Bilik, The Trainers Bible (New York, 1916).

<sup>98</sup>S. E. Bilik, The Trainers Bible, rev. ed. (New York, 1956), p. 9.



athletic psychology, principles of personal hygiene, fundamentals of training and conditioning, and the first aid care of athletic injuries. In concluding the subject, Bilik notes, ". . . I want to emphasize that a trainer must recognize that the scope of his work in the care of injuries is limited by the degree of his preparation and experience, and by the definitely outlined limitations imposed upon him by his superiors."<sup>99</sup>

Featherstone<sup>100</sup> states that athletic trainers can make athletic training a more effective profession if attempts would be made to gain some knowledge of the simple treatments for the more common injuries. By obtaining a working knowledge of anatomy and physiology, together with the rudiments of first aid, athletic trainers are able to work in closer harmony with coaches and have a greater understanding of the work done by those few people in the medical world who are attempting to treat sports injuries.

A handbook for athletic trainers was written by Bevan.<sup>101</sup> He states that to do the athletic training job well, the athletic trainer must possess a thorough knowledge of muscle and joint anatomy, as well as a highly developed skill in taping, massage, and corrective exercises. The athletic

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<sup>99</sup>Ibid., p. 22.

<sup>100</sup>Featherstone, op. cit., p. 41.

<sup>101</sup>Bevan, op. cit., pp. vii, 1.

trainer should know anatomy, physiology, and kinesiatics and also have a mastery of massage procedures and applications for injuries.

A popular book that deals with athletic training was written by Rawlinson,<sup>102</sup> the athletic trainer at Oklahoma University. He believes that the athletic trainer should have a sound understanding of the human body and should be a keen and unbiased observer of the body in action. Emphasis is placed on knowledge about physiology, kinesiology, psychology, hygiene, massage, conditioning, therapeutic exercise, diet, and the various modalities of physical therapy.

Dayton<sup>103</sup> states the general qualifications of an athletic trainer. According to Dayton, an athletic trainer should have a sound knowledge of anatomy and physiology. The athletic trainer should be able to apply adhesive strapping and bandages and do physical therapy under the direction of the team physician. In addition to this, the athletic trainer should be fully capable of conducting conditioning programs and rehabilitation exercises for the athletic program.

The formal education of an athletic trainer is outlined in two athletic training books. Both books emphasize a need for a physical therapy educational background for athletic

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<sup>102</sup>Ken Rawlinson, Modern Athletic Training (Englewood Cliffs, New Jersey, 1961), p. 2.

<sup>103</sup>Dayton, op. cit., p. 10.

trainers. In the book by Dolan,<sup>104</sup> six pages are used to outline the courses taken during a fifth year while preparing for a certified physical therapy degree. Dolan recommended that college and university physical education leaders advise a young man preparing for service as an athletic trainer to have a physical education background which is fortified by one year of post-graduate work in physical therapy. He suggests that the future athletic trainer have

(1) Eight to ten semester hours of laboratory courses in general biology, anatomy, zoology, and physiology.

(2) Six to eight semester hours in laboratory courses in chemistry and physics or other physical science.

(3) Ten semester hours in social sciences including six semester hours or credit in psychology.<sup>105</sup>

In addition to the above outline, Dolan suggests that the physical education student should become well acquainted with the following courses: educational psychology, general biology, chemistry, public health, nutrition, kinesiology, remedial and orthopedic physical education, physiology of exercise, anatomy, and public speaking. Dolan recognizes the need for undergraduate practical experience. He believes that the future athletic trainer should begin training by acting as a student trainer. The student trainer would work for a varsity athletic squad under the direction of the head

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<sup>104</sup> Joseph B. Dolan, Treatment and Prevention of Athletic Injuries (Danville, Illinois, 1955), pp. 12-18.

<sup>105</sup> Ibid., p. 16.

athletic trainer. According to Dolan, the student trainer who experiences this undergraduate training is just as far ahead in the profession as the pre-medical student who fills the summer months with hospital experience as an orderly.

In the second book, Klafs and Arnheim<sup>106</sup> outline the prerequisites for attaining admission to physical therapy school. They state that the athletic trainer of today is expected to be a college graduate, usually with a major in physical education. Emphasis should be placed in the area of rehabilitation or a major in physical therapy. If the athletic trainer becomes certified in physical therapy, he is usually better qualified and consequently much sought after by schools needing to fill a vacancy. There is, at the college level, an increasing trend to hire, as athletic trainers, those individuals who either (1) in addition to a major in physical education, science, or nursing, complete from one to one and one-half years of post-graduate work in an acceptable school of physical therapy, or (2) complete all work leading to a degree in physical therapy or to certification at a school which meets the standards set forth by the Council on Medical Education and Hospitals of the A.M.A. Although there are some variations from school to school, the following list gives an idea of the curriculum in a school of physical therapy. Most physical therapy

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<sup>106</sup>Klafs and Arnheim, op. cit., pp. 22-25.

schools will require as prerequisites at least one semester of college physics, college chemistry, human anatomy, human physiology, and elementary psychology. According to Klafs and Arnheim, in many physical therapy schools a course in zoology may substitute for the course in physiology. Courses and description of content for either a major in or certification in physical therapy are

| Course and description of content  | Units | Total<br>Class<br>Hours |
|--|-------|-------------------------|
| Introduction to physical therapy and medical ethics<br>(Orientation to the field; therapist relationship; administrative concepts)   | 2     | 32                      |
| Therapeutic exercises and assistive devices<br>(Exercise procedures for rehabilitation and reconditioning; use of crutches, braces, and prosthetic devices)  | 6     | 168                     |
| Clinical lectures<br>(Series of lectures dealing with therapeutics in fields of orthopedics and surgery--injuries to joints and bones, postsurgical therapy, healing antisepsis, anesthesia, therapeutic procedures for brain and spinal cord injuries and related problems, diseases and disorders of children) | 4-6   | 128-<br>256             |
| Massage and hydrotherapy<br>(Techniques and methods of massage; uses of water in treatment of injury and disease; laboratory experiences in use of equipment and application of techniques)  | 2     | 64                      |

|   |   |     |
|---|---|-----|
| Psychology of handicapped individuals<br>(Psychotherapeutic techniques, understanding handicapped individuals)  | 3 | 96  |
| Pathology<br>(Study of course, process, and effect of disease)  | 2 | 64  |
| Tests and measurements in physical therapy<br>(Basic statistical procedures and their application to physical therapy; nerve-muscle testing; measurement of flexibility)              | 2 | 64  |
| Human anatomy for physical therapists<br>(Advanced study of human structures; laboratory work--dissection and prosection)   | 4 | 128 |
| Applied principles of kinesiology<br>(Science of human motion; interrelationships of anatomy, physiology, and physics as they apply to mechanisms of human movement; laboratory work) | 2 | 48  |
| Physiology of exercise<br>(Physiological implications of human movement; effects of muscle activity on body processes; laboratory work)   | 2 | 48  |
| Neurophysiology and anatomy<br>(Advanced study of anatomy and physiology of the nervous system)   | 3 | 72  |
| Care and treatment of athletic injuries<br>(Theory and laboratory experiences in conditioning, treatment of athletic injuries, and reconditioning)                                    | 3 |     |

|                   |   |     |
|-------------------|---|-----|
| Clinical practice | 6 | 800 |
|-------------------|---|-----|

(Student training in hospital or clinic situations under medical supervision; clinical practice at end of program, to be given following completion of all course work).<sup>107</sup>

According to William E. Newell,<sup>108</sup> Executive Secretary of the N.A.T.A., there are no colleges or universities in the United States who specifically grant an undergraduate degree in athletic training at this time. There are, however, several schools which offer a major in physical education or health with a minor, specialization, or an emphasis in athletic training.

At Indiana University in Bloomington the "Athletic Trainer Emphasis" may be earned in conjunction with a major in health and safety or with a major in physical education for men.<sup>109</sup> Specific course requirements leading to this endorsement can be found in that school's bulletin.

A second school in Indiana, Indiana State University at Terre Haute, offers a twenty-four hour "Specialization" in athletic training which is equivalent to a minor program. There are several possibilities the student may choose, depending upon how much time is to be spent in school. A

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<sup>107</sup> Ibid., pp. 24-25.

<sup>108</sup> Letter from William E. Newell, Executive Secretary of the National Athletic Trainers Association, July 18, 1967.

<sup>109</sup> Indiana University, Bulletin of the School of Health, Physical Education, and Recreation (Bloomington, Indiana, 1967-68), pp. 24-28.

student at Indiana State University may earn a major in physical education with a specialization in athletic training. A student may major in any field he desires, then minor in physical education and specialize in athletic training. A double major in such as physical education and science with a specialization in athletic training may be chosen by the student. If the student wishes, pre-physical therapy requirements may be included with the athletic training specialization, provided the student has an average grade of "B" or better.<sup>110</sup>

Purdue University, in Lafayette, Indiana, offers what is referred to as "Option D."<sup>111</sup> The option can be taken at the end of the freshman year. This program for athletic trainers is as close to a major in athletic training as was found in the review.

Texas Christian University in Fort Worth recently began a degree program for athletic trainers. The program offered is a major in health and physical education for men with secondary certification that includes athletic training.<sup>112</sup>

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<sup>110</sup> Indiana State University, Specialization in Athletic Training (Terre Haute, Indiana, 1967-68), pp. 1-3.

<sup>111</sup> Purdue University, Announcements--School of Humanities, Social Science, and Education (Lafayette, Indiana, 1968), pp. 27, 30-31, 84-86.

<sup>112</sup> Texas Christian University, Bulletin 1967-68, School of Education/Teacher Education (Fort Worth, Texas, 1967), pp. 591, 675.



In summary, the role and professional preparation of the athletic trainer have been reported in many types of educational literature. Through the review, it was concluded that the recommended athletic trainer's role and professional education varies from author to author, with some of the same specifics stated by each author. By an analysis of the many opinions, the potential role and professional preparation of the athletic trainer were identified and a questionnaire was constructed to secure the data from which guidelines of a program for the undergraduate professional education of the college and university athletic trainer could be determined.

## CHAPTER III

### COLLECTION OF THE DATA

The problem of this study was to compare the existing role of college and university athletic trainers in Texas and bordering states with the role of college and university athletic trainers (1) as recommended by national athletic training specialists, and (2) as recommended by college and university athletic directors in Texas and bordering states. Seven major procedures were necessary for obtaining and interpreting the data: (1) construction of the initial questionnaire, (2) selection of the panel of judges, (3) validation of the initial questionnaire, (4) construction of the final questionnaire, (5) identification of the national athletic training specialists, (6) identification of the athletic trainers and athletic directors in Texas and bordering states, and (7) administration of the final questionnaire.

#### Construction of the Initial Questionnaire

Construction of the initial questionnaire was begun with the determination of possible roles and educational background of college and university athletic trainers. Through an intensive review of the literature, including professional publications, related studies, books, and periodicals, an extensive list of several hundred possible

roles of the athletic trainer was compiled. The roles of the athletic trainer were classified within the following six categories for descriptive purposes: (1) staff position and function, (2) the athletic training room, (3) attitudes toward the role of the athletic trainer, (4) prevention of athletic injuries, (5) care and treatment of injuries, and (6) rehabilitation of athletic injuries. To insure content validity of the initial questionnaire, the extensive list was revised and consolidated, leaving a total of 166 possible roles. The six titles of the categories were omitted in the questionnaire to simplify the instrument. Thus, the 166 items were grouped under one title and identified as Part One.

Based upon information found in the literature, a list of possible educational preparation items was prepared. The items were subdivided into two categories: (1) academic preparation and (2) practical experience preparation. In the questionnaire these two titles were omitted, as in Part One. The list, when revised and consolidated, was composed of sixty-four items which were included in the questionnaire.

The items concerning the professional preparation were identified as Part Two of the initial questionnaire. The initial questionnaire then had two areas of concentration: (1) the role of the athletic trainer and (2) the professional preparation of the athletic trainer.

Instructions for responding to Part One and Part Two of the questionnaire by the athletic trainers, athletic directors, and national specialists were placed at the beginning of each part, respectively. The possible response choices for each part were placed in the right hand margin of each page.

The initial questionnaire was prepared for presentation to a panel of judges for the purpose of validation. The validity response choices were typed in the left hand margin of each page, in line with the respective items. These were typed in red ink to distinguish them from the regular response choices on the page. A separate page was provided for each judge to make any additions and/or corrections that he deemed necessary for the questionnaire to be valid. Space was also provided for additional comments offered by the judge.

#### Selection of the Panel of Judges

A panel of judges was selected for determining the validity of the instrument to be administered. Criteria used in the selection of the panel of judges were (1) that they represent a geographic cross-section of the nation; (2) that they be recognized as outstanding men in the field of athletic training; (3) that they have an understanding of the field of athletic training; and (4) that they be either physical therapists, medical doctors, Doctors of Philosophy or Doctors of Education, or practicing athletic

training or any combination of these factors. While material was gathered for the review of literature, a list of eleven possible panel members was compiled, including authors, athletic trainers, and influential men in the field of athletic training. From this list the seven panel members were chosen who fulfilled the criteria best. One member of the original panel of seven was dropped from the list when he asked to be excused. That particular member was a medical doctor. A physical therapist was then added to the list to bring the total number of judges to seven.

The seven panel members are briefly described as follows: (1) an athletic trainer, who is a registered physical therapist, from an eastern university; (2) an athletic trainer, with a Doctor of Philosophy degree, from a southern university; (3) an athletic trainer, who is a registered physical therapist, from a prominent college in the north central states (his master's thesis dealt with a topic similar to the present study); (4) an athletic trainer, who is a registered physical therapist, from a western university; (5) an athletic trainer, with a Doctor of Philosophy degree, from a western university (he has published a book on athletic injuries); (6) a chairman of a Health, Physical Education and Nursing Department at a midwestern university, with a Doctor of Education degree (he has written two books and many articles on the subject of athletic training); (7) a professor, with a Doctor of Philosophy

degree, on the faculty of an eastern university (he has a reputation of being an outstanding research worker, and has taught at several universities including one in the southwest, where he taught a course in athletic training).

#### Validation of the Initial Questionnaire

The initial questionnaire was presented to the panel of judges to obtain their opinions for validation of the items included in the instrument. A copy of the questionnaire (Appendix D), accompanied by a cover letter (Appendix A) and a return-addressed stamped envelope was mailed to each member of the panel. Each judge was asked to respond to the questionnaire by indicating whether or not he thought each of the items would provide the researcher with the needed information and if the item was clearly stated. In Part One of the questionnaire the judges were asked to indicate by circling the red "1" if the item could be a role of an athletic trainer and was clearly written. If he could not decide on the validity of the item he was to circle the red "2." If the item appeared unclear, or for some other reason did not pertain to the problem of the study, the judge was asked to circle the red "3."

In Part Two of the questionnaire each judge was asked to indicate what he thought could be an experience necessary in preparing someone for the athletic training profession, and if the item was clearly stated. The instructions for

indicating validation responses of each item was the same as in Part One. It was arbitrarily decided that agreement by four of the seven judges was necessary for an item to be valid and retained in the questionnaire.

#### Construction of the Final Questionnaire

The final questionnaire was constructed from responses collected from the panel of judges. The questionnaire was then to be used to determine the existing role of the college and university athletic trainers in Texas and bordering states and the professional preparation experienced by the athletic trainers. It was also to be used to determine the role and professional preparation of college and university athletic trainers as recommended by a panel of national athletic training specialists and the athletic directors in Texas and bordering states who have a full time athletic trainer on their staff.

Four of the panel judges agreed on the validity of all items in both parts of the questionnaire. Therefore, all items were retained for the final questionnaire. Any additional item or suggestion of a new item given by any of the judges on the panel was to be given further consideration by each of the other members. Only one item was suggested by a panel member. One member suggested that the "American Corrective Therapy Association" be added to the list of possible organizations, page three of Part One of the questionnaire, in which the athletic trainer could hold

membership. As several organizations already were mentioned in the instrument, and because this was a minor area of the study, it was decided to delete the item. Also, it was determined that the Corrective Therapy Degree is not held by many athletic trainers. Therefore, membership of athletic trainers in the organization would be rather limited. With no item failing to gain validity support from the panel of judges, and no item being added to the questionnaire, the initial questionnaire was not changed for use in the study (Appendix E).

#### Identification of the National Athletic Training Specialists

Identification of the national athletic training specialists to be used in the study was accomplished in the following manner. A letter was written to the Executive Secretary of the N.A.T.A. requesting a list of sixty national athletic training specialists. A list of 551 "Active" members of the N.A.T.A. was received from the secretary. The title of "Active" member of the Association is the highest rank which can be attained by its membership.

For an evenly distributed national representation, four "Active" members were chosen from each of the ten districts of the N.A.T.A., with the exception of Districts Six and Ten. District Six is made up of Texas and Arkansas only. These two states were part of the five states to be used in obtaining information from athletic trainers. Many of the college



and university athletic trainers were the national specialists in that district, therefore there would be a duplication of names if they were used as specialists. District Ten is Canada and could not be used since the study was only concerned with national specialists.

After selection of the four national specialists from the districts, the remaining twenty-eight specialists were chosen arbitrarily at random from the available list of names. Sixty national athletic training specialists from throughout the United States, excluding Texas and Arkansas, were thus selected as participants in the study.

Identification of the Athletic Trainers and  
Athletic Directors in Texas and  
Bordering States

The identification of the full-time college and university athletic trainers in Texas and bordering states, and the respective athletic directors, was made in the following manner. Through a review of the membership roll of the N.A.T.A.,<sup>1</sup> The Blue Book of College Athletics,<sup>2</sup> and current state sports guides of each of the five states involved--

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<sup>1</sup>National Athletic Trainers Association, National Athletic Trainers Association Membership Roster (January, 1968), pp. 1-25.

<sup>2</sup>Akron Engraving Company, The Blue Book of College Athletics (Cleveland, 1967).

Texas Sports Guide,<sup>3</sup> Oklahoma Coaches Directory,<sup>4</sup> Louisiana Sports Guide,<sup>5</sup> Arkansas Sports Guide,<sup>6</sup> and Arizona-New Mexico Sports Guide<sup>7</sup>--a list was compiled of all college and university full-time athletic trainers and their athletic directors in Texas and the four bordering states. The final list included forty-seven full-time athletic trainers, and, of course, the same number of athletic directors. Each of these men were asked, in the cover letter for the final questionnaire, to participate in the study.

#### Administration of the Final Questionnaire

Administration of the final questionnaire to college and university athletic trainers in Texas and bordering states, the respective athletic directors, and to the national athletic training specialists was made to collect the data for the study. A cover letter (Appendix B), explaining the nature of the study and appealing for participation in the study, along with a return-addressed stamped envelope, was mailed with the questionnaire (Appendix E).

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<sup>3</sup>Ray Franks, editor, Texas Sports Guide (Amarillo, Texas, 1967), pp. 56-62.

<sup>4</sup>Jerry Andress and Clell Wade, editors, Oklahoma Coaches Directory (Quincy, Illinois, 1967), pp. 67-69.

<sup>5</sup>Glen Zulauf, editor, Louisiana Sports Guide (Amarillo, Texas, 1967), pp. 6-10.

<sup>6</sup>Glen Zulauf, editor, Arkansas Sports Guide (Amarillo, Texas, 1967), pp. 6-10.

<sup>7</sup>Ray Franks, editor, Arizona-New Mexico Sports Guide (Amarillo, Texas, 1967), p. 46.

The forty-seven full-time college and university athletic trainers in Texas and bordering states were asked to respond to each item in Part One of the questionnaire by indicating whether or not the item described one of his roles as a college or university athletic trainer. To indicate their choice, they were to circle either the "yes" or "no" in the right hand margin opposite the item to signify:

"Yes, this item is one of my roles as a college or university athletic trainer," or "No, this item is not one of my roles as a college or university athletic trainer." This group of respondees was asked to respond to Part Two of the instrument by indicating the degree of emphasis placed on the item while the respondent was an undergraduate student. To respond they were to circle, in the right hand margin, the "4" indicating "much emphasis," the "3" indicating "some emphasis," the "2" indicating "little emphasis," or the "1" indicating "no emphasis." They were asked to use the following guidelines for determining the emphasis placed on an item.

|                 |  |
|-----------------|--|
| Much emphasis   | (Type of degree held, extensive instruction in this area, broad experience in this area)                 |
| Some emphasis   | (Adequate coverage but with a minimum of emphasis, ample competencies obtained, a minimum of experience) |
| Little emphasis | (Area considered but brief coverage, covered to some degree, little experience provided)                 |

No emphasis (Degree not required or was omitted, not exposed to instruction in this area, no experience provided, area excluded)

The sixty national athletic training specialists and the forty-seven athletic directors were asked to respond to Part One of the questionnaire by stating whether or not they thought the item ought to be a role of the college or university athletic trainer. To indicate their choice, they were to circle either "yes" or "no" in the right hand margin opposite the item to signify: "Yes, this item ought to be a role of the college and university athletic trainer," or "No, this item ought not to be a role of the college and university athletic trainer." In Part Two they were asked to respond to the questionnaire by indicating the degree of emphasis they thought ought to be placed on each item when preparing an undergraduate student as an athletic trainer. To respond, they were asked to circle, in the right hand margin, the "4" indicating "much emphasis," the "3" indicating "some emphasis," the "2" indicating "little emphasis," or the "1" indicating "no emphasis." They were asked to use the following guidelines for determining the emphasis placed on an item.

Much emphasis (Type of degree necessary, extensive instruction, highly desirable experience of service, broad experiences)

Some emphasis (Ought to be adequately exposed to coverage, ample competencies necessary, a minimum of experience needed)

|                 |  |
|-----------------|--|
| Little emphasis | (Ought to be considered but not essential, brief coverage, little experience necessary in this area, can be omitted) |
| No emphasis     | (Degree unnecessary or unimportant, ought to be omitted, no exposure to this area necessary, no experience needed)   |

Approximately two weeks after the first mailing, a follow-up memorandum (Appendix C) was sent to non-respondents to renew the appeal for them to participate in the study. A second copy of the instructions and the questionnaire, as well as a return-addressed, stamped envelope, was also sent to this group.

## CHAPTER IV

### PRESENTATION OF FINDINGS

#### Introduction

The first two hypotheses of the study dealt with the differences between the roles practiced by college and university athletic trainers in Texas and bordering states and the roles recommended by national athletic training specialists and college and university athletic directors in Texas and bordering states. Hypotheses III through VI dealt with the differences between the level of emphasis received on professional preparation experiences by college and university athletic trainers in Texas and bordering states and the level of emphasis recommended on professional preparation experiences by national athletic training specialists and college and university athletic directors in Texas and bordering states. The t technique was the statistical technique used to determine the level of significance of the differences. Each hypothesis was arbitrarily accepted or rejected at the .05 level of significance. When the level of significance reached .02, .01, or .001, it was reported. Critical ratios were rounded to two decimal places.

The t-ratios are presented in tabular form for the items of each section of the questionnaire. The questionnaire

was divided into sections for better presentation and interpretation of the findings. Part One of the questionnaire, used for Hypotheses I and II, had fifteen sections. Part Two of the questionnaire, used for Hypotheses III through VI, had five sections. A copy of the entire questionnaire can be found in Appendix E. A discussion of the results of each section of the questionnaire immediately follows the presentation of the results of the section. All of the statistical computations were made at the North Texas State University Computer Center, Denton, Texas.

The findings presented are related to the following hypotheses:

I. Each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, will differ significantly from the corresponding role recommended by national athletic training specialists.

II. Each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, will differ significantly from the corresponding role recommended by college and university athletic directors in Texas and bordering states.

III. Academic preparation received by the college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate academic

curriculum recommended by national athletic training specialists.

IV. Academic preparation received by the college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate academic curriculum recommended by college and university athletic directors in Texas and bordering states.

V. The undergraduate practical experience received by the college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate practical experience recommended by national athletic training specialists.

VI. The undergraduate practical experience received by the college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate practical experience recommended by college and university athletic directors in Texas and bordering states.

#### Summary of the Response to the Study

Data presented in the following six tables indicate the total number of questionnaires returned from a state or a district of the N.A.T.A. and the percentage of the total number of returns. Also indicated are the number of possible returns and the number of actual returns from a state or a district with the percentage of returns from the state or district.



As shown in Table I, a total of forty-one college and university athletic trainers in Texas and bordering states

TABLE I  
DISTRIBUTION OF ATHLETIC TRAINERS BY STATES

| State      | No. of Respondents | Per Cent |
|------------|--------------------|----------|
| Arkansas   | 3                  | 7.32     |
| Louisiana  | 12                 | 29.27    |
| New Mexico | 3                  | 7.32     |
| Oklahoma   | 5                  | 12.19    |
| Texas      | 18                 | 43.90    |
| Total      | 41                 | 100.00   |

returned the questionnaire. The majority of the returns were from Texas and Louisiana, which had eighteen and twelve responses, respectively.

Indicated in Table II are the percentages of returns possible from the college and university athletic trainers

TABLE II  
DISTRIBUTION OF RETURNS OF ATHLETIC TRAINERS POSSIBLE FROM EACH STATE

| State      | Possible Returns | No. of Returns | Per Cent |
|------------|------------------|----------------|----------|
| Arkansas   | 4                | 3              | 75.00    |
| Louisiana  | 12               | 12             | 100.00   |
| New Mexico | 3                | 3              | 100.00   |
| Oklahoma   | 6                | 5              | 83.33    |
| Texas      | 22               | 18             | 81.81    |
| Total      | 47               | 41             | 87.23    |

in Texas and bordering states. In two states, Louisiana and New Mexico, 100 per cent of the athletic trainers responded to the study. One response was lacking from each of the two states, Oklahoma and Arkansas. Over 80 per cent of the athletic trainers in Texas responded to the questionnaire. Forty-one of a possible forty-seven, or 87.23 per cent, of the college and university athletic trainers in Texas and bordering states responded to the questionnaire.

College and university athletic directors in Texas and bordering states did not respond as readily as the athletic trainers. This was as expected, partly due to the heavy schedule of the athletic directors during the time the questionnaire was administered. Only thirty of the athletic directors responded to the questionnaire. Revealed in Table III is the distribution of states from which the

TABLE III  
DISTRIBUTION OF ATHLETIC DIRECTORS BY STATES

| State      | No. of Respondents | Per Cent |
|------------|--------------------|----------|
| Arkansas   | 2                  | 6.67     |
| Louisiana  | 8                  | 26.67    |
| New Mexico | 3                  | 10.00    |
| Oklahoma   | 4                  | 13.33    |
| Texas      | 13                 | 43.33    |
| Total      | 30                 | 100.00   |

college and university athletic directors responded. Texas and Louisiana had the largest number of returns with thirteen and eight respectively.

In all five of the states at least 50 per cent of the college and university athletic directors participated in the study. Indicated in Table IV are the percentages of

TABLE IV  
DISTRIBUTION OF RETURNS OF ATHLETIC DIRECTORS  
POSSIBLE FROM EACH STATE

| State      | Possible Returns | No. of Returns | Per Cent |
|------------|------------------|----------------|----------|
| Arkansas   | 4                | 2              | 50.00    |
| Louisiana  | 12               | 8              | 75.00    |
| New Mexico | 3                | 3              | 100.00   |
| Oklahoma   | 6                | 4              | 66.67    |
| Texas      | 22               | 13             | 59.09    |
| Total      | 47               | 30             | 63.82    |

returns possible from the college and university athletic directors in the five states. The athletic directors from New Mexico and Louisiana responded very favorably with 100 per cent and 75 per cent responses, respectively. From all five states there was a respectable percentage of returns of over 50 per cent. Thirty of the forty-seven, or 63.82 per cent of the college and university athletic directors responded to the questionnaire.

The percentage of returns from the members of the districts of the National Athletic Trainers Association who

were recognized as national athletic training specialists indicated interest throughout the nation on the topic of the study. Of the sixty specialists asked to participate in the study, fifty-five, or 91.67 per cent, responded to the questionnaire. Data contained in Table V reveal that the

TABLE V  
DISTRIBUTION OF NATIONAL ATHLETIC TRAINING  
SPECIALISTS BY N.A.T.A. DISTRICTS

| N.A.T.A. District   | No. of Respondents | Per Cent |
|---|--------------------|----------|
| I Conn., Me., Mass., N.H., R.I., Vt.                                      | 4                  | 7.273    |
| II Del., N.J., N.Y., Penn.  | 10                 | 18.182   |
| III Md., N.C., S.C., Va., W. Va., D.C.                                    | 9                  | 16.364   |
| IV Ill., Ind., Mich., Minn., Ohio,<br>Wis., Un. of Iowa, Marshall College | 9                  | 16.364   |
| V Iowa, Kan., Mo., Neb., N.D., S.D.,<br>Okla., Un. of Colo.               | 3                  | 5.454    |
| VII Colo., Mont., Utah, Wyo., Ariz.,<br>N.M., Idaho                       | 3                  | 5.454    |
| VIII Calif., Nev., Ore., Wash., Hawaii,<br>Alaska                         | 7                  | 12.727   |
| IX Ala., Fla., Ga., Ky., La., Miss.,<br>Tenn.                             | 9                  | 16.364   |
| District Not Identified   | 1                  | 1.818    |
| Total   | 55                 | 100.000  |

athletic training specialists from N.A.T.A. Districts II, III, IV, and IX were responsible for over 60 per cent of the returns. District VI includes Texas and Arkansas only and was used in another part of the study, therefore, as explained in Chapter III, Texas and Arkansas were not included in this part of the study. District X comprises only Canada

and since the study investigated recommendations from national athletic training specialists, Canada was not included. One questionnaire was returned with a Texas postmark. Since no specialists were chosen from Texas, the district from which the questionnaire came could not be identified.

Revealed in Table VI is a comparison of the number of possible returns from the national athletic training

TABLE VI

DISTRIBUTION OF RETURNS OF NATIONAL ATHLETIC TRAINING SPECIALISTS POSSIBLE FROM EACH N.A.T.A. DISTRICT

| N.A.T.A. District       | Possible Returns | No. of Returns | Per Cent |
|-------------------------|------------------|----------------|----------|
| I                       | 5                | 4              | 80.00    |
| II                      | 10               | 10             | 100.00   |
| III                     | 9                | 9              | 100.00   |
| IV                      | 10               | 9              | 90.00    |
| V                       | 4                | 3              | 75.00    |
| VII                     | 5                | 3              | 60.00    |
| VIII                    | 9                | 8              | 88.889   |
| IX                      | 8                | 8              | 100.00   |
| District Not Identified |                  | 1              |          |
| Total                   | 60               | 55             | 91.67    |

specialists from each district and the number of actual returns. As in Table V, Districts VI and X were omitted in Table VI for the same reasons. As indicated in Table V, one questionnaire postmark did not clearly indicate the district from which it was returned. In three districts, II, III, and IX, 100 per cent of those national athletic training

specialists asked to participate in the study returned the questionnaire. Fifty-five out of a possible sixty, or 91.67 per cent, of the national athletic training specialists responded to the questionnaire.

Data Related to Part One of the Questionnaire:  
Group I and Group II

In the following discussion and tables the college and university athletic trainers in Texas and bordering states are referred to as Group I, the national athletic training specialists as Group II, and the college and university athletic directors as Group III. In each table, the first group listed is compared with the second group. A positive  $t$ -ratio indicates a result in favor of the first group listed, while a negative  $t$ -ratio indicates a result in favor of the second group.

According to Hypothesis I, there would be a significant difference between each of the existing roles, included in the study, of college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, and the corresponding role recommended by national athletic training specialists.

The data for Section 1 of Part One yielded  $t$ -ratios for five items which were not significant, which indicates basic agreement between the college and university athletic trainers and the national athletic training specialists. Significant  $t$ -ratios at greater than the .05 level of significance were

obtained for three other items, as indicated in Table VII. Although not all were at a significant level, a greater

TABLE VII  
SUMMARY FOR PART I, SECTION 1 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
STAFF FUNCTION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 1    | 90.2                             | 69.8  | 20.4                   | 2.39     | .02                      |
| 2    | 53.6                             | 81.1  | 27.5                   | -2.86    | .01                      |
| 3    | 56.0                             | 45.2  | 10.8                   | 1.03     | NS*                      |
| 4    | 19.5                             | 5.6   | 13.9                   | 2.08     | .05                      |
| 5    | 31.7                             | 41.5  | 9.8                    | -.97     | NS                       |
| 6    | 48.7                             | 66.0  | 17.3                   | -1.68    | NS                       |
| 7    | 14.6                             | 13.2  | 1.4                    | .19      | NS                       |
| 8    | 26.8                             | 15.0  | 11.8                   | 1.41     | NS                       |

\*Not significant.

percentage of college and university athletic trainers reported practicing five of the eight roles mentioned than was recommended by the group of national athletic training specialists.

The two groups were basically in agreement on the following: Directly responsible to the head coach of each sport (Item 3), A full-time athletic trainer with no teaching or coaching duties (Item 5), A full-time athletic trainer with teaching duties (Item 6), A full-time athletic trainer with coaching duties (Item 7), and A full-time athletic trainer with teaching and coaching duties (Item 8).

There was significant disagreement between the two groups at greater than the .01 level on Directly responsible to the school physician (Item 2). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

Disagreement was significant between the two groups at greater than the .02 level on Directly responsible to the athletic director (Item 1). A greater percentage of college and university athletic trainers were practicing the role than the percentage of national athletic training specialists who recommended practice of the role.

The two groups disagreed significantly at greater than the .05 level on Directly responsible to the head of the physical education department (Item 4). A lower percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

The data for Section 2 yielded t-ratios for five items which were not significant, indicating basic agreement between the college and university athletic trainers and the national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for five other items, as indicated in Table VIII. Although the difference was not significant in every case, a greater percentage of national athletic training specialists recommended that the



role be practiced in six of the ten roles mentioned than was reported being practiced by the college and university athletic trainers.

TABLE VIII

SUMMARY FOR PART I, SECTION 2 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
TEACHING FUNCTION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 9    | 56.0                             | 50.9  | 5.1                    | .49      | NS*                      |
| 10   | 41.4                             | 35.8  | 5.6                    | .55      | NS                       |
| 11   | 34.1                             | 56.6  | 22.5                   | -2.16    | .05                      |
| 12   | 56.0                             | 75.4  | 19.4                   | -1.98    | .05                      |
| 13   | 31.7                             | 52.8  | 21.1                   | -2.04    | .05                      |
| 14   | 12.1                             | 20.7  | 8.6                    | -1.10    | NS                       |
| 15   | 21.9                             | 24.5  | 2.6                    | .29      | NS                       |
| 16   | 9.7                              | 24.5  | 14.8                   | -1.85    | NS                       |
| 17   | 14.6                             | 39.6  | 25.0                   | -2.65    | .01                      |
| 18   | 31.7                             | 13.2  | 18.5                   | 2.17     | .05                      |

\*Not significant.

The two groups were in agreement basically on the following: Teach in the spring semester (Item 9), Teach in the fall semester (Item 10), Teach a course in kinesiology (Item 14), Teach a course in health and safety (Item 15), and Teach a course in physiology of exercise (Item 16).

There was significant disagreement between the two groups at greater than the .01 level on Teach a course in therapeutic techniques (Item 17). A higher percentage of

national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

Disagreement was significant between the two groups at greater than the .05 level on Teach in the summer session (Item 11), Teach a course in the care and prevention of athletic injuries (Item 12), and Teach a course in first aid (Item 13). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

The two groups disagreed significantly at greater than the .05 level on Teach a course in required physical education activities (Item 18). A lower percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

A study of the data presented in Table IX shows that Section 3 yielded t-ratios for eight items which were not significant, indicating basic agreement between the two groups. Significant t-ratios at greater than the .05 level were obtained for six other items. Although not all were at a significant level, a greater percentage of college and university athletic trainers reported practicing eleven of the fourteen roles mentioned than was recommended by the group of national athletic training specialists.

TABLE IX

SUMMARY FOR PART I, SECTION 3 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
COACHING FUNCTION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|---|------------------------|-------|--------------------------|
|      | N = 41                           | N = 53  |                        |       |                          |
| 19   | 19.5                             | 1.8   | 17.7                   | 2.89  | .01                      |
| 20   | 26.8                             | 5.6   | 21.2                   | 2.86  | .01                      |
| 21   | 2.4                              | 1.8   | .6                     | .20   | NS*                      |
| 22   | 7.3                              | 0.0   | 7.3                    | 1.99  | .05                      |
| 23   | 12.1                             | 1.8   | 10.3                   | 2.03  | .05                      |
| 24   | 7.3                              | 3.7   | 3.6                    | .77   | NS                       |
| 25   | 7.3                              | 0.0   | 7.3                    | 1.99  | .05                      |
| 26   | 14.6                             | 1.8   | 12.8                   | 2.35  | .02                      |
| 27   | 2.4                              | 3.7   | 1.3                    | -.35  | NS                       |
| 28   | 0.0                              | 1.8   | 1.8                    | -.86  | NS                       |
| 29   | 0.0                              | 0.0   | 0.0                    | 0.00  | NS                       |
| 30   | 0.0                              | 0.0   | 0.0                    | 0.00  | NS                       |
| 31   | 7.3                              | 3.7   | 3.6                    | .77   | NS                       |
| 32   | 0.0                              | 3.7   | 0.0                    | -1.24 | NS                       |

\*Not significant.

Basic agreement between the two groups was indicated on the following: Coach in the summer session (Item 21), Coach baseball (Item 24), Coach golf (Item 27), Coach gymnastics (Item 28), Coach soccer (Item 29), Coach swimming (Item 30), Coach tennis (Item 31), and Other sports (specify) (Item 32).

The data presented in Table IX indicates that there was significant disagreement between the two groups at greater than the .01 level on Coach in the fall semester (Item 19) and Coach in the spring semester (Item 20). A greater percentage of college and university athletic trainers were

practicing the role than the percentage of national athletic training specialists who recommended practice of the role.

Disagreement was significant between the two groups at greater than the .02 level on Coach track (Item 26). A higher percentage of college and university athletic trainers were practicing the role than the percentage of national athletic training specialists who recommended practice of the role.

The two groups disagreed significantly at greater than the .05 level on Coach basketball (Item 22) and Coach cross country (Item 25). A greater percentage of the college and university athletic trainers were practicing the role than the percentage of national athletic training specialists who recommended practice of the role.

The data for Section 4 yielded t-ratios for five items which were not significant, indicating basic agreement between the college and university athletic trainers and national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for three other items, as indicated in Table X. Although the difference was not significant in every case, a greater percentage of national athletic training specialists recommended that the role be practiced in seven of the eight roles mentioned than was reported being practiced by the college and university athletic trainers.

TABLE X  
 SUMMARY FOR PART I, SECTION 4 OF THE QUESTIONNAIRE:  
 GROUP I AND GROUP II ON  
 SUPERVISORY FUNCTION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|---|------------------------|-------|--------------------------|
|      | N = 41                           | N = 53  |                        |       |                          |
| 33   | 36.5                             | 64.1  | 27.6                   | -2.65 | .01                      |
| 34   | 65.8                             | 75.4  | 9.6                    | -1.01 | NS*                      |
| 35   | 58.5                             | 83.0  | 24.5                   | -2.63 | .01                      |
| 36   | 97.5                             | 92.4  | 5.1                    | 1.08  | NS                       |
| 37   | 92.6                             | 94.3  | 1.7                    | - .33 | NS                       |
| 38   | 85.3                             | 94.3  | 9.0                    | -1.46 | NS                       |
| 39   | 78.0                             | 90.5  | 12.5                   | -1.68 | NS                       |
| 40   | 48.7                             | 83.0  | 34.3                   | -3.53 | .001                     |

\*Not significant.

The two groups were basically in agreement on the following: Supervisory duties for some part-time employees (Item 34), Supervisory duties of student help (Item 36), Supervise and train student trainers (Item 37), Appoint student trainers (Item 38), and Hire student trainers (Item 39).

Disagreement was significant between the two groups at greater than the .001 level on Hold student trainer clinics (Item 40). A greater percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

There was significant disagreement between the two groups at greater than the .01 level on Supervisory duties for some full-time employees (Item 33) and Hire assistant athletic trainers (Item 35). A higher percentage of national athletic training specialists recommended practice of the roles than the percentage of college and university athletic trainers who actually practiced the roles.

A study of the data presented in Table XI shows that Section 5 yielded t-ratios for four items which were not

TABLE XI

SUMMARY FOR PART I, SECTION 5 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON ATHLETIC  
TRAINING BUDGET

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 41   | 34.1                             | 62.2  | 28.1                   | -2.70    | .01                      |
| 42   | 73.1                             | 90.5  | 17.4                   | -2.22    | .05                      |
| 43   | 78.0                             | 92.4  | 14.4                   | -2.00    | .05                      |
| 44   | 87.8                             | 92.4  | 4.6                    | - .75    | NS*                      |
| 45   | 65.8                             | 73.5  | 7.7                    | - .80    | NS                       |
| 46   | 90.2                             | 92.4  | 2.2                    | - .37    | NS                       |
| 47   | 29.2                             | 52.8  | 23.6                   | -2.29    | .05                      |
| 48   | 87.8                             | 90.5  | 2.7                    | - .42    | NS                       |

\*Not significant.

significant, indicating basic agreement between the college and university athletic trainers and national athletic training specialists. Significant t-ratios at greater than

the .05 level were obtained for four other items. Although the difference was not significant in every case, a greater percentage of national athletic training specialists recommended that each of the eight roles be practiced more than was reported being practiced by the college and university athletic trainers.

The two groups were in basic agreement on the following: Responsible for budget expenditures for supplies (Item 44), Responsible for budget expenditures for medical treatments (Item 45), Order and check athletic training equipment and supplies (Item 46), and Maintain a standing and running inventory of the athletic training equipment and supplies (Item 48).

The two groups disagreed significantly at greater than the .01 level on Offer assistance in planning the physical education curriculum (Item 41). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

There was significant disagreement between the two groups at greater than the .05 level on Maintain an annual budget (Item 42), Request that a budget be allotted for the care and prevention of athletic injuries at the school (Item 43), and Obtain approval of the team physician of any athletic training equipment and supplies purchased (Item 47). A greater percentage of national athletic training specialists

recommended practice of the roles than the percentage of college and university athletic trainers who actually practiced the roles.

An examination of Table XII indicates that Section 6 yielded t-ratios for five items which were not significant

TABLE XII  
SUMMARY FOR PART I, SECTION 6 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
ATHLETIC EQUIPMENT

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 49   | 58.5                             | 60.3  | 1.8                    | - .17    | NS*                      |
| 50   | 26.8                             | 7.5   | 9.3                    | 2.53     | .02                      |
| 51   | 73.1                             | 75.4  | 2.3                    | - .25    | NS                       |
| 52   | 95.1                             | 98.1  | 3.0                    | - .81    | NS                       |
| 53   | 41.4                             | 66.0  | 24.6                   | -2.37    | .02                      |
| 54   | 34.1                             | 64.1  | 30.0                   | -2.88    | .01                      |
| 55   | 17.0                             | 1.8   | 15.2                   | 2.63     | .01                      |
| 56   | 85.3                             | 90.5  | 5.2                    | - .77    | NS                       |
| 57   | 95.1                             | 98.1  | 3.0                    | - .81    | NS                       |

\*Not significant.

at the .05 level, thus the college and university athletic trainers and the national athletic training specialists were basically in agreement on these items. Significant t-ratios at greater than the .05 level were obtained for four other items. Although the difference was not significant in every case, percentages reveal that more national athletic training specialists recommend practice of seven of the nine items



than is being practiced by the college and university athletic trainers.

Basic agreement between the two groups was indicated for the following: Maintain records of athletic equipment and supplies (Item 49), Require all athletes to be fully dressed in a complete regulation uniform (Item 51), Require each player wear any special equipment which has been prepared for him (Item 52), Build safety equipment and injury protection pads (Item 56), and Advise coaches and the team physician in the selection of protective equipment for purchase and use in the athletic department (Item 57).

There was significant disagreement between the two groups at greater than the .01 level on Supervise a check for broken or faulty permanent equipment such as dummies, sleds, basketball goals, etc. (Item 54). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

There was significant disagreement between the two groups at greater than the .01 level on Repair athletic equipment such as shoulder pads, helmets, gloves, etc. (Item 55). A greater percentage of college and university athletic trainers were practicing the role than the percentage of national athletic training specialists who recommended practice of the role.

Disagreement was significant at greater than the .02 level between the two groups on Supervise a weekly check of each player's equipment to check on its working condition (Item 53). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

The two groups disagreed significantly at greater than the .02 level on Issue the athletic equipment such as shoulder pads, shoes, laundry, etc. (Item 50). A greater percentage of college and university athletic trainers were practicing the role than the percentage of national athletic training specialists who recommended practice of the role.

The data presented in Table XIII indicates that Section 7 yielded  $t$ -ratios for twelve items which were not significant, indicating basic agreement between college and university athletic trainers and national athletic training specialists. A significant  $t$ -ratio at greater than the .05 level was obtained for one of the items. There was no difference in the number of items practiced by a greater percentage of college and university athletic trainers and the number of items recommended by a greater percentage of national athletic training specialists.

The two groups were basically in agreement on the following: Clean the athletic training room daily (Item 59), Advise proper authorities regarding the ready availability

TABLE XIII

SUMMARY FOR PART I, SECTION 7 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
TRAINING ROOM

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|---|------------------------|-------|--------------------------|
|      | N = 41                           | N = 53  |                        |       |                          |
| 58   | 92.6                             | 100.0   | 7.4                    | -2.01 | .05                      |
| 59   | 78.0                             | 67.9  | 10.1                   | 1.08  | NS*                      |
| 60   | 97.5                             | 88.6  | 8.9                    | 1.62  | NS                       |
| 61   | 95.1                             | 100.0   | 4.9                    | -1.62 | NS                       |
| 62   | 97.5                             | 100.0   | 2.5                    | -1.15 | NS                       |
| 63   | 95.1                             | 100.0   | 4.9                    | 1.62  | NS                       |
| 64   | 97.5                             | 100.0   | 2.5                    | -1.15 | NS                       |
| 65   | 100.0                            | 94.3  | 5.7                    | 1.55  | NS                       |
| 66   | 43.9                             | 39.6  | 4.4                    | .41   | NS                       |
| 67   | 26.8                             | 30.1  | 3.3                    | -.35  | NS                       |
| 68   | 7.3                              | 13.2  | 5.9                    | -.92  | NS                       |
| 69   | 7.3                              | 3.7   | 3.6                    | .77   | NS                       |
| 70   | 100.0                            | 100.0   | 00.0                   | 0.00  | NS                       |

\*Not significant.

of the training rooms to enable them to have access to dressing rooms, entrances, athletic equipment, toilet facilities, and shower rooms (Item 60), Advise proper authorities that the training room should supply adequate and proper illumination and lighting (Item 61), Advise proper authorities that the training room should provide adequate ventilation (Item 62), Advise proper authorities that the size of the training room should be adequate (Item 63), Keep the equipment within the training room in proper working condition (Item 64), Provide storage areas for the athletic training supplies

Item (65), Provide a training room designed as a multi-purpose room (Item 66), Provide late papers, magazines, and periodicals in the athletic training room for athletes to read (Item 67), Provide a place for players to study in the athletic training room (Item 68), Provide cots or beds in the athletic training room for the athlete who wants to stretch out for a rest (Item 69), and Keep first aid kits up to date and available (Item 70).

There was significant disagreement between the two groups at greater than the .05 level on Keep the athletic training quarters in an orderly and sanitary state (Item 58). A greater percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

A study of the data presented in Table XIV shows that Section 8 yielded t-ratios for fourteen items which were not significant, indicating basic agreement between college and university athletic trainers and national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for five other items. Although the difference was usually not significant, percentages reveal that more national athletic training specialists recommend practice of ten of the nineteen items than is being practiced by college and university athletic trainers. For six of the

remaining nine items, each group responded with 100 per cent affirmative answers.

TABLE XIV

SUMMARY FOR PART I, SECTION 8 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
ATTITUDE

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 71   | 56.0                             | 47.1  | 8.9                    | .85      | NS*                      |
| 72   | 65.8                             | 43.3  | 22.5                   | 2.16     | .05                      |
| 73   | 70.7                             | 47.1  | 23.6                   | 2.29     | .05                      |
| 74   | 70.7                             | 100.0   | 29.3                   | -4.21    | .001                     |
| 75   | 12.1                             | 28.3  | 16.2                   | -1.90    | NS                       |
| 76   | 12.1                             | 22.6  | 10.5                   | -1.31    | NS                       |
| 77   | 29.2                             | 41.5  | 12.3                   | -1.23    | NS                       |
| 78   | 17.0                             | 50.9  | 33.9                   | -3.39    | .001                     |
| 79   | 65.8                             | 90.5  | 24.7                   | -2.95    | .01                      |
| 80   | 92.6                             | 98.1  | 5.5                    | -1.30    | NS                       |
| 81   | 100.0                            | 100.0   | 00.0                   | 0.00     | NS                       |
| 82   | 100.0                            | 100.0   | 00.0                   | 0.00     | NS                       |
| 83   | 100.0                            | 100.0   | 00.0                   | 0.00     | NS                       |
| 84   | 100.0                            | 100.0   | 00.0                   | 0.00     | NS                       |
| 85   | 100.0                            | 100.0   | 00.0                   | 0.00     | NS                       |
| 86   | 100.0                            | 100.0   | 00.0                   | 0.00     | NS                       |
| 87   | 97.5                             | 98.1  | .6                     | -.19     | NS                       |
| 88   | 92.6                             | 96.2  | 3.6                    | -.76     | NS                       |
| 89   | 73.1                             | 86.7  | 13.6                   | -1.65    | NS                       |

\*Not significant.

The two groups were in basic agreement on: Wear a white uniform in the athletic training room (Item 71), Member of the American Physical Therapy Association (Item 75), Member of the American Registry of Physical Therapists (Item 76), Member of the American Association for Health, Physical

Education, and Recreation (Item 77), Know escape mechanisms used by an injured athlete (Item 80), Help the athlete to face his problems whether they be psychological or emotional (Item 81), Help the athlete to act in a constructive manner in overcoming his problems (Item 82), Be realistic in considering the aches and pains of the athletes (Item 83), Have a genuine interest in the team and its individuals (Item 84), On request, counsel coaches and/or players regarding conditioning, staleness, exercise, nutrition, protective equipment, and similar matters (Item 85), Provide ego-support for the athletes (Item 86), Help develop motivation in the athletes (Item 87), Promote interest in the athletic training program to the school, team, and the community (Item 88), and Assume physical therapy duties for schools and communities in time of emergency (Item 89).

There was significant disagreement between the two groups at greater than the .001 level on Member of the National Athletic Trainers Association (Item 74) and Member of the American College of Sports Medicine (Item 78). A higher percentage of national athletic training specialists recommended practice of the roles than the percentage of college and university athletic trainers who actually practiced the roles.

The two groups disagreed significantly at greater than the .01 level on Further formal education (Item 79). A lower percentage of college and university athletic trainers

were practicing the role than the percentage of national athletic training specialists who recommended practice of the role.

Disagreement was significant between the two groups at greater than the .05 level on Wear a white uniform on the game field (Item 72) and Have the authority to discuss the injuries situation of the team with newswriters and commentators (Item 73). A greater percentage of college and university athletic trainers were practicing the roles than the percentage of national athletic training specialists who recommended practice of the roles.

The data presented in Table XV indicates that Section 9 yielded t-ratios for ten items which were not significant, thus indicating basic agreement between college and university athletic trainers and national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for seven other items. Although not all were at a significant level, a greater percentage of college and university athletic trainers reported practicing nine of the seventeen roles mentioned than was recommended by the group of national athletic training specialists.

The two groups were found to be in basic agreement on: Advise proper authorities to request attendance of the team physician at basketball contests (Item 91), Advise proper authorities to request the team physician to be subject to call during practice hours (Item 93), Jointly responsible,

TABLE XV

SUMMARY FOR PART I, SECTION 9 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON TEAM  
PHYSICIAN RELATIONSHIP

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|---|------------------------|-------|--------------------------|
|      | N = 41                           | N = 53  |                        |       |                          |
| 90   | 90.2                             | 100.0   | 9.8                    | -2.32 | .05                      |
| 91   | 73.1                             | 86.7  | 13.6                   | -1.65 | NS*                      |
| 92   | 29.2                             | 50.9  | 21.7                   | -2.11 | .05                      |
| 93   | 92.6                             | 98.1  | 5.5                    | -1.30 | NS                       |
| 94   | 97.5                             | 90.5  | 7.0                    | 1.37  | NS                       |
| 95   | 95.1                             | 96.2  | 1.1                    | - .26 | NS                       |
| 96   | 97.5                             | 98.1  | .6                     | - .19 | NS                       |
| 97   | 82.9                             | 64.1  | 18.8                   | 2.01  | .05                      |
| 98   | 80.4                             | 58.4  | 22.0                   | 2.26  | .05                      |
| 99   | 65.8                             | 39.6  | 26.2                   | 2.51  | .02                      |
| 100  | 36.5                             | 16.9  | 19.6                   | 2.16  | .05                      |
| 101  | 100.0                            | 98.1  | 1.9                    | .88   | NS                       |
| 102  | 73.1                             | 47.1  | 26.0                   | 2.53  | .02                      |
| 103  | 92.6                             | 90.5  | 2.1                    | .36   | NS                       |
| 104  | 26.8                             | 33.9  | 7.1                    | - .73 | NS                       |
| 105  | 78.0                             | 62.2  | 15.8                   | 1.64  | NS                       |
| 106  | 97.5                             | 98.1  | .6                     | - .19 | NS                       |

\*Not significant.

with the team physician, the coach, and the administration,  
for the handling of athletic injuries (Item 94), Have a  
standard procedure for handling athletic injuries (Item 95),  
Accept the responsibility of handling injuries which do not  
require the services of a team physician (Item 96), Provide  
first aid for injuries to athletes (Item 101), Be allowed by  
the team physician to diagnose minor injuries (Item 103), Be  
allowed by the team physician to diagnose major injuries



(Item 104), Prescribe treatment following diagnosis (Item 105), and Provide follow-up treatment to athletic injuries (Item 106).

Significant disagreement existed between the two groups at greater than the .02 level on Have full responsibility for handling injuries occurring during games of contact sports (Item 99) and Transport athletes to the doctor in a private car if injured during practice (Item 102). A higher percentage of college and university athletic trainers were practicing the roles than the percentage of national athletic training specialists who recommended practice of the roles.

The two groups disagreed significantly at greater than the .05 level on Have full responsibility for handling injuries occurring during practice sessions of contact sports (Item 97), Have full responsibility for handling injuries occurring during scrimmages in contact sports (Item 98), and Assume sole responsibility for the medical care of the athletes (Item 100). A greater percentage of college and university athletic trainers were practicing the roles than the percentage of national athletic training specialists who recommended practice of the roles.

There was significant disagreement between the two groups at greater than the .05 level on Advise proper authorities to request attendance of the team physician at football contests (Item 90) and Advise proper authorities to request attendance of the team physician at minor sport

contests (Item 92). A higher percentage of national athletic training specialists recommended practice of the roles than the percentage of college and university athletic trainers who actually practiced the roles.

The data for Section 10 yielded t-ratios for eleven items which were not significant, indicating basic agreement between college and university athletic trainers and national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for two other items as indicated in Table XVI. Although the difference was

TABLE XVI

SUMMARY FOR PART I, SECTION 10 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON CARE  
AND TREATMENT OF INJURIES

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 107  | 92.6                             | 94.3  | 1.7                    | - .33    | NS*                      |
| 108  | 100.0                            | 100.0   | 0.0                    | 0.00     | NS                       |
| 109  | 75.6                             | 86.7  | 11.1                   | -1.38    | NS                       |
| 110  | 43.9                             | 20.7  | 23.2                   | 2.41     | .02                      |
| 111  | 31.7                             | 24.5  | 7.2                    | .77      | NS                       |
| 112  | 26.8                             | 22.6  | 4.2                    | .46      | NS                       |
| 113  | 85.3                             | 90.5  | 5.2                    | - .77    | NS                       |
| 114  | 63.4                             | 94.3  | 30.9                   | -3.77    | .001                     |
| 115  | 36.5                             | 43.3  | 6.8                    | - .66    | NS                       |
| 116  | 46.3                             | 43.3  | 3.0                    | .29      | NS                       |
| 117  | 70.7                             | 58.4  | 12.3                   | 1.23     | NS                       |
| 118  | 19.5                             | 7.5   | 12.0                   | 1.73     | NS                       |
| 119  | 12.1                             | 9.4   | 2.6                    | .42      | NS                       |

\*Not significant.

rarely significant, a greater percentage of college and university athletic trainers reported practicing seven of the thirteen items mentioned than was recommended by the group of national athletic training specialists. One of the remaining items had 100 per cent response from each of the two groups.

The two groups were in basic agreement on the following: Examine all injured athletes before they leave the dressing room (Item 107), Be alert for injuries on the playing area at all times (Item 108), Request access to the health services of the school during practices and games (Item 109), Regularly give rehabilitative treatment to students incurring injuries in a physical education or intramural activity (Item 111), Provide medical attention for spectators (Item 112), Arrange for the dietary supplements for athletes if necessary (Item 113), Responsible for supervision of the athletes' sleeping habits (Item 115), Dispense prescription medicine (Item 116), Dispense medication to be taken orally (Item 117), Give injections (Item 118), and Apply sutures for minor injuries if needed (Item 119).

There was significant disagreement between the two groups at greater than the .001 level on Responsible for the menu of the pre-game meal (Item 114). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

Disagreement was significant between the two groups at greater than the .02 level on Regularly give first aid treatment for injuries incurred in physical education or intramural activities (Item 110). A higher percentage of college and university athletic trainers were practicing the role than the percentage of national athletic training specialists who recommended practice of the role.

The data for Section 11 yielded t-ratios for nine items which were not significant, indicating basic agreement between college and university athletic trainers and national athletic training specialists. A significant t-ratio at greater than the .05 level was obtained for one item, as indicated in Table XVII. Although the difference was rarely significant,

TABLE XVII

SUMMARY FOR PART I, SECTION 11 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON PREVENTION  
OF INJURIES

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 120  | 80.4                             | 90.5  | 10.1                   | -1.40    | NS*                      |
| 121  | 100.0                            | 100.0   | 00.0                   | 0.00     | NS                       |
| 122  | 92.6                             | 98.1  | 5.5                    | -1.30    | NS                       |
| 123  | 100.0                            | 100.0   | 0.0                    | 0.00     | NS                       |
| 124  | 100.0                            | 100.0   | 0.0                    | 0.00     | NS                       |
| 125  | 90.2                             | 98.1  | 7.9                    | -1.68    | NS                       |
| 126  | 51.2                             | 69.8  | 18.6                   | -1.83    | NS                       |
| 127  | 43.9                             | 67.9  | 24.0                   | -2.33    | .02                      |
| 128  | 24.3                             | 37.7  | 13.4                   | -1.38    | NS                       |
| 129  | 43.9                             | 45.2  | 1.3                    | - .12    | NS                       |

\*Not significant.

percentages reveal that more national athletic training specialists recommend practice of seven of the ten items than is being practiced by college and university athletic trainers. The remaining three items each had 100 per cent affirmative answers from both groups.

The two groups were in basic agreement on the following: Responsible for having, at contact sports, an ambulance on immediate call for all games (Item 120), Instruct all athletes to report all injuries (Item 121), Give careful training and instruction to athletes to help prevent accidents (Item 122), Stress prevention of injuries (Item 123), Provide preventive taping and wrapping for the athletes (Item 24), Suggest to the coach that fatigued athletes be substituted for (Item 125), Organize and be responsible for the out-of-season conditioning program of the athletes (Item 126), Supervise the warm-up of athletic teams before practice (Item 128), and Provide assistance to the coaches in organizing practice schedules (Item 129).

The two groups disagreed significantly at greater than the .02 level on Organize and be responsible for the weight training program of the athletes (Item 127). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

A study of the data presented in Table XVIII shows that Section 12 yielded t-ratios for fifteen items which were not

TABLE XVIII

SUMMARY FOR PART I, SECTION 12 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON HEALTH  
AND MEDICAL RECORDS

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 130  | 68.2                             | 73.5  | 15.3                   | - .56    | NS*                      |
| 131  | 87.8                             | 88.6  | .8                     | - .11    | NS                       |
| 132  | 39.0                             | 45.2  | 6.2                    | - .60    | NS                       |
| 133  | 46.3                             | 45.2  | 1.1                    | .10      | NS                       |
| 134  | 95.1                             | 98.1  | 3.0                    | - .81    | NS                       |
| 135  | 78.0                             | 88.6  | 10.6                   | -1.38    | NS                       |
| 136  | 53.6                             | 26.4  | 22.2                   | -2.21    | .05                      |
| 137  | 85.3                             | 98.1  | 12.8                   | -2.33    | .02                      |
| 138  | 60.9                             | 86.7  | 25.8                   | -2.88    | .01                      |
| 139  | 63.4                             | 50.9  | 12.5                   | 1.21     | NS                       |
| 140  | 73.1                             | 88.6  | 15.5                   | -1.93    | NS                       |
| 141  | 82.9                             | 90.5  | 7.6                    | -1.09    | NS                       |
| 142  | 48.7                             | 32.0  | 16.7                   | 1.64     | NS                       |
| 143  | 36.5                             | 22.6  | 13.9                   | 1.47     | NS                       |
| 144  | 80.4                             | 83.0  | 2.6                    | - .32    | NS                       |
| 145  | 85.3                             | 83.0  | 2.3                    | .30      | NS                       |
| 146  | 85.3                             | 92.4  | 7.1                    | -1.10    | NS                       |
| 147  | 100.0                            | 92.4  | 7.6                    | 1.80     | NS                       |

\*Not significant.

significant, indicating basic agreement between college and university athletic trainers and national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for three other items. Although the difference was rarely significant, percentages reveal that more national athletic training specialists recommend practice of twelve of the eighteen items than is being practiced by college and university athletic trainers.

Basic agreement between the two groups was indicated on the following: Send letters to each athlete during the summer months encouraging conditioning prior to September (Item 130), Responsible for knowing the health and medical history of the athletes (Item 131), Obtain from each athlete a permit, signed by the parents, before the boy can participate in the athletic program (Item 132), Appoint a team physician (Item 133), Keep records of the injuries to athletes (Item 134), Maintain up-to-date health records (Item 135), Responsible for notification of the parents at the time of an athlete's injury (Item 139), Supervise the issuing of teeth protectors (Item 140), Have knowledge of medical and dental insurance (Item 141), Have possession of the insurance records (Item 142), Handle the insurance policies (Item 143), Advise proper authorities that each athlete should be properly protected by medical insurance (Item 144), Allow the team physician sole authority for determining the physical fitness of an athlete who wished to participate in the athletic program (Item 145), Obtain the team physician's approval of each athlete before he participates in each sport (Item 146), and Prohibit all forms of "horseplay" or other activities which might result in injury (Item 147).

The data presented in Table XVIII indicate significant disagreement between the two groups at greater than the .01 level on Fill out a standard accident report with pertinent information regarding any injury (Item 138). A greater percentage of national athletic training specialists recommended

practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

There was significant disagreement between the two groups at greater than the .02 level on Maintain a case history of the athlete's injuries while attending your school (Item 137). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

The two groups disagreed significantly at greater than the .05 level on Maintain a case history of the athlete of all injuries received prior to attending your school (Item 136). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

The data for Section 13 yielded non-significant t-ratios for each of the three items, indicating basic agreement between college and university athletic trainers and national athletic training specialists as indicated in Table XIX. Although none were significant, a greater percentage of college and university athletic trainers reported practicing two of the three roles mentioned than was recommended by the group of national athletic training specialists.

The two groups were in basic agreement on the following: Eliminate all possible hazards by surveying dressing rooms,



TABLE XIX

SUMMARY FOR PART I, SECTION 13 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
ATHLETIC FACILITIES

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | $t$   | Level of<br>Significance |
|------|----------------------------------|---|------------------------|-------|--------------------------|
|      | N = 41                           | N = 53  |                        |       |                          |
| 148  | 95.1                             | 100.0   | 4.9                    | -1.62 | NS*                      |
| 149  | 7.3                              | 3.7   | 3.6                    | .77   | NS                       |
| 150  | 14.6                             | 5.6   | 9.0                    | 1.47  | NS                       |

\*Not significant.

shower rooms, and playing areas (Item 148), Responsible for having the gymnasium cleaned (Item 149), and Responsible for the care of the athletic field (Item 150).

A study of the data presented in Table XX shows that Section 14 yielded non-significant  $t$ -ratios for each of the six items, indicating basic agreement between college and university athletic trainers and national athletic training specialists. Although none were significant, a greater percentage of college and university athletic trainers reported practicing four of the six roles mentioned than was recommended by the group of national athletic training specialists.

The two groups were in basic agreement on the following: Maintain and utilize daily weight charts for all athletes (Item 151), Responsible for the rehabilitation of injuries to athletes (Item 152), Use the techniques of corrective and

TABLE XX

SUMMARY FOR PART I, SECTION 14 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
REHABILITATION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 151  | 100.0                            | 92.4  | 7.6                    | 1.80     | NS*                      |
| 152  | 97.5                             | 100.0   | 2.5                    | -1.15    | NS                       |
| 153  | 92.6                             | 98.1  | 5.5                    | -1.30    | NS                       |
| 154  | 92.6                             | 83.0  | 9.6                    | 1.38     | NS                       |
| 155  | 29.2                             | 22.6  | 6.6                    | .72      | NS                       |
| 156  | 90.2                             | 79.2  | 11.0                   | 1.44     | NS                       |

\*Not significant.

physical therapy under the direction of the team physician (Item 153), Responsible for the post-operative care of the athletes (Item 154), Responsible for making the final decision as to when an athlete should return to competition following a major injury (Item 155), and Responsible for making the final decision as to when an athlete should return to competition following a minor injury (Item 156).

An examination of Table XXI indicates that Section 15 yielded t-ratios for five items which were not significant at the .05 level, thus college and university athletic trainers and national athletic training specialists were in basic agreement on these items. Significant t-ratios at greater than the .05 level were obtained for five other items. Although the difference was not significant in every case,

TABLE XXI

SUMMARY FOR PART I, SECTION 15 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
ATHLETIC CONTESTS

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Training<br>Specialists | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|---|------------------------|----------|--------------------------|
|      | N = 41                           | N = 53  |                        |          |                          |
| 157  | 85.3                             | 73.5  | 11.8                   | 1.38     | NS*                      |
| 158  | 85.3                             | 73.5  | 11.8                   | 1.38     | NS                       |
| 159  | 80.4                             | 94.3  | 13.9                   | -2.07    | .05                      |
| 160  | 85.3                             | 86.7  | 1.4                    | - .19    | NS                       |
| 161  | 21.9                             | 49.0  | 27.1                   | -2.69    | .01                      |
| 162  | 90.2                             | 92.4  | 2.2                    | - .37    | NS                       |
| 163  | 60.9                             | 54.7  | 6.2                    | .60      | NS                       |
| 164  | 87.8                             | 98.1  | 10.3                   | -2.02    | .05                      |
| 165  | 58.5                             | 92.4  | 33.9                   | -3.91    | .001                     |
| 166  | 39.0                             | 60.3  | 21.3                   | -2.04    | .05                      |

\*Not significant.

percentages reveal that more national athletic training specialists recommend practice of seven of the ten roles mentioned than is being practiced by college and university athletic trainers.

Basic agreement between the two groups was indicated for the following: Provide the half-time refreshments for the team (Item 157), Provide the half-time refreshments for visiting team (Item 158), Provide medical care for visiting team (Item 160), Provide an athletic trainer for teams leaving the campus (Item 162), and Supervise the athletic team throughout an entire trip, except for the pre-game instructions and the direction during the game (Item 163).

There was significant disagreement between the two groups at greater than the .001 level on Accompany basketball teams on all trips (Item 165). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers actually practicing the role.

The two groups disagreed significantly at greater than the .01 level on Provide a student trainer for visiting team (Item 161). A higher percentage of national athletic training specialists recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

There was a significant disagreement between the two groups at greater than the .05 level on Provide an athletic training area for the visting team (Item 159), Accompany football teams on all trips (Item 164), and Accompany track teams on all trips (Item 166). A greater percentage of national athletic training specialists recommended practice of the roles than the percentage of college and university athletic trainers who actually practiced the roles.

#### Summary of Data Related to Hypothesis I

Hypothesis I for the study stated that each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, would differ significantly from the

corresponding role recommended by national athletic training specialists. The above hypothesis was partially rejected on the basis of the limited number of items with  $t$ -ratios which were significant at greater than the .05 level. A majority of the total items must have had significant  $t$ -ratios for the acceptance of the hypothesis.

A summary of the number of items having significant  $t$ -ratios, non-significant  $t$ -ratios, and the percentages of the total in each category is presented in Table XXII.

TABLE XXII

SUMMARY OF THE NUMBER AND PERCENTAGE OF ITEMS WITH SIGNIFICANT AND NON-SIGNIFICANT  $t$ -RATIOS FOR COLLEGE AND UNIVERSITY ATHLETIC TRAINERS AND NATIONAL ATHLETIC TRAINING SPECIALISTS (QUESTIONNAIRE: PART ONE)

| Description                            | Number | Percentage |
|--|--------|------------|
| Items with significant $t$ -ratios     | 49     | 29.52      |
| Items with non-significant $t$ -ratios | 117    | 70.48      |
| Total                                  | 166    | 100.00     |

An examination of Table XXII reveals that college and university athletic trainers and national athletic training specialists demonstrated significant disagreement on only 29.52 per cent of the items at greater than the .05 level. Thus, Hypothesis I was accepted for the following items:

1. Directly responsible to the athletic director

2. Directly responsible to the school physician
4. Directly responsible to the head of the physical education department
11. Teach in the summer session
12. Teach a course in the care and prevention of athletic injuries
13. Teach a course in first aid
17. Teach a course in therapeutic techniques
18. Teach a course in required physical education activities
19. Coach in the fall semester
20. Coach in the spring semester
22. Coach basketball
23. Coach football
25. Coach cross country
26. Coach track
33. Supervisory duties for some full-time employees
35. Hire assistant athletic trainers
40. Hold student trainer clinics
41. Offer assistance in planning the physical education curriculum
42. Maintain an annual budget
43. Request that a budget be allotted for the care and prevention of athletic injuries at the school
47. Obtain approval of the team physician of any athletic training equipment and supplies purchased

50. Issue the athletes' equipment such as shoulder pads, shoes, laundry, etc.
53. Supervise a weekly check of each player's equipment to check on its working condition
54. Supervise a check for broken or faulty permanent equipment such as dummies, sleds, basketball goals, etc.
55. Repair athletic equipment such as shoulder pads, helmets, gloves, etc.
58. Keep the athletic training quarters in an orderly and sanitary state
72. Wear a white uniform on the game field
73. Have the authority to discuss the injuries situation of the team with newswriters and commentators
74. Member of the National Athletic Trainers Association
78. Member of the American College of Sports Medicine
79. Further formal education
90. Advise proper authorities to request attendance of the team physician at football contests
92. Advise proper authorities to request attendance of the team physician at minor sport contests
97. Have full responsibility for handling injuries occurring during practice sessions of contact sports
98. Have full responsibility for handling injuries occurring during scrimmages in contact sports

99. Have full responsibility for handling injuries occurring during games of contact sports
100. Have sole responsibility for the medical care of the athletes
102. Transport athletes to the doctor in a private car if injured during practice
110. Regularly give first aid treatments for injuries incurred in physical education or intramural activities
114. Responsible for the menu of the pre-game meal
127. Organize and be responsible for the weight training program of the athletes
136. Maintain a case history of the athlete of all injuries received prior to attending your school
137. Maintain a case history of the athletes' injuries while attending your school
138. Fill out a standard accident report with pertinent information regarding any injury
159. Provide an athletic training area for visiting team
161. Provide a student trainer for visiting team
164. Accompany football teams on all trips
165. Accompany basketball team on all trips
166. Accompany track teams on all trips

Hypothesis I was rejected for the remaining 117 items concerning the role of the college and university athletic



trainer. For these items, there was no significant difference between the percentage of college and university athletic trainers practicing the role and the percentage of national athletic training specialists recommending practice of the item by college and university athletic trainers.

Data Related to Part One of the Questionnaire:  
Group I and Group III

It was stated in Hypothesis II that each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, would differ significantly from the corresponding role recommended by college and university athletic directors in Texas and bordering states.

The data for Section 1 of Part One yielded non-significant t-ratios for each of the eight items, indicating basic agreement between college and university athletic trainers and college and university athletic directors as indicated in Table XXIII. Although the difference was not significant in any case, a greater percentage of college and university athletic trainers reported practicing seven of the eight roles mentioned than was recommended by the group of college and university athletic directors.

An examination of Table XXIII shows that the two groups were basically in agreement on the following: Directly responsible to the athletic director (Item 1), Directly responsible to the school physician (Item 2), Directly

TABLE XXIII

SUMMARY FOR PART I, SECTION 1 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
STAFF FUNCTION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|-------|--------------------------|
|      | N = 41                           | N = 30                            |                        |       |                          |
| 1    | 90.2                             | 83.3                              | 6.9                    | .86   | NS*                      |
| 2    | 53.6                             | 46.6                              | 7.0                    | .58   | NS                       |
| 3    | 56.0                             | 33.3                              | 22.7                   | 1.89  | NS                       |
| 4    | 19.5                             | 13.3                              | 6.2                    | .68   | NS                       |
| 5    | 31.7                             | 53.3                              | 21.6                   | -1.82 | NS                       |
| 6    | 48.7                             | 43.3                              | 5.4                    | .45   | NS                       |
| 7    | 14.6                             | 6.6                               | 8.0                    | 1.05  | NS                       |
| 8    | 26.8                             | 13.3                              | 13.5                   | 1.37  | NS                       |

\*Not significant.

responsible to the head coach of each sport (Item 3),  
Directly responsible to the head of the physical education  
department (Item 4), A full-time athletic trainer with no  
teaching or coaching duties (Item 5), A full-time athletic  
trainer with teaching duties (Item 6), A full-time athletic  
trainer with coaching duties (Item 7), and A full-time  
athletic trainer with teaching and coaching duties (Item 8).

A study of the data presented in Table XXIV shows that section 2 yielded non-significant  $t$ -ratios for each of the ten items, indicating basic agreement between college and university athletic trainers and college and university athletic directors. Although the difference was not significant in any case, percentages reveal that more college and

university athletic directors recommend practice of six of the ten items than is being practiced by the college and university athletic trainers.

TABLE XXIV

SUMMARY FOR PART I, SECTION 2 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
TEACHING FUNCTION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | $t$   | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|-------|--------------------------|
|      | N = 41                           | N = 30                            |                        |       |                          |
| 9    | 56.0                             | 43.3                              | 12.7                   | 1.05  | NS*                      |
| 10   | 41.4                             | 30.0                              | 8.6                    | .98   | NS                       |
| 11   | 34.1                             | 46.6                              | 12.5                   | -1.06 | NS                       |
| 12   | 56.0                             | 70.0                              | 14.0                   | -1.19 | NS                       |
| 13   | 31.7                             | 53.3                              | 21.6                   | -1.82 | NS                       |
| 14   | 12.1                             | 26.6                              | 14.5                   | -1.56 | NS                       |
| 15   | 21.9                             | 10.0                              | 11.9                   | 1.32  | NS                       |
| 16   | 9.7                              | 10.0                              | .3                     | -.04  | NS                       |
| 17   | 14.6                             | 26.6                              | 12.0                   | -1.25 | NS                       |
| 18   | 31.7                             | 20.0                              | 11.7                   | 1.10  | NS                       |

\*Not significant.

The two groups were in basic agreement on the following: Teach in the spring semester (Item 9), Teach in the fall semester (Item 10), Teach in the summer session (Item 11), Teach a course in the care and prevention of athletic injuries (Item 12), Teach a course in first aid (Item 13), Teach a course in kinesiology (Item 14), Teach a course in health and safety (Item 15), Teach a course in physiology of exercise (Item 16), Teach a course in therapeutic techniques (Item 17), and Teach a course in required physical education activities (Item 18).

A study of the data presented in Table XXV shows that Section 3 yielded t-ratios for twelve items which were not

TABLE XXV

SUMMARY FOR PART I, SECTION 3 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
COACHING FUNCTION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|----------|--------------------------|
|      | N = 41                           | N = 30                            |                        |          |                          |
| 19   | 19.5                             | 6.6                               | 12.9                   | 1.54     | NS*                      |
| 20   | 26.8                             | 6.6                               | 20.2                   | 2.17     | .05                      |
| 21   | 2.4                              | 0.0                               | 2.4                    | .85      | NS                       |
| 22   | 7.3                              | 3.3                               | 4.0                    | .72      | NS                       |
| 23   | 12.1                             | 3.3                               | 8.8                    | 1.32     | NS                       |
| 24   | 7.3                              | 0.0                               | 7.3                    | 1.51     | NS                       |
| 25   | 7.3                              | 0.0                               | 7.3                    | 1.51     | NS                       |
| 26   | 14.6                             | 0.0                               | 14.6                   | 2.18     | .05                      |
| 27   | 2.4                              | 6.6                               | 4.2                    | .87      | NS                       |
| 28   | 0.0                              | 0.0                               | 0.0                    | 0.00     | NS                       |
| 29   | 0.0                              | 0.0                               | 0.0                    | 0.00     | NS                       |
| 30   | 0.0                              | 0.0                               | 0.0                    | 0.00     | NS                       |
| 31   | 7.3                              | 6.6                               | .7                     | .11      | NS                       |
| 32   | 0.0                              | 0.0                               | 0.0                    | 0.00     | NS                       |

\*Not significant.

significant, indicating basic agreement between college and university athletic trainers and college and university athletic directors. Significant t-ratios at greater than the .05 level were found for two other items. Although the difference was rarely significant, a greater percentage of college and university athletic trainers reported practicing nine of the fourteen items mentioned than was recommended by the group of college and university athletic directors.

Four of the remaining five items had 100 per cent of each group responding in the negative.

Basic agreement between the two groups was indicated for Coach in the fall semester (Item 19), Coach in the summer session (Item 21), Coach basketball (Item 22), Coach football (Item 23), Coach baseball (Item 24), Coach cross country (Item 25), Coach golf (Item 27), Coach gymnastics (Item 28), Coach soccer (Item 29), Coach swimming (Item 30), Coach tennis (Item 31), and Other sports (specify) (Item 32).

There was significant disagreement between the two groups at greater than the .05 level on Coach in the spring semester (Item 20) and Coach track (Item 26). A higher percentage of college and university athletic trainers were practicing the roles than the percentage of college and university athletic directors who recommended practice of the roles.

As indicated in Table XXVI, the data for Section 4 yielded non-significant t-ratios for each of the eight items, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Although the difference was not significant in any case, percentages reveal that more college and university athletic directors recommend practice of five of the eight items than is being practiced by the college and university athletic trainers.

TABLE XXVI

SUMMARY FOR PART I, SECTION 4 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
SUPERVISORY FUNCTION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|----------|--------------------------|
|      | N = 41                           | N = 30                            |                        |          |                          |
| 33   | 36.5                             | 26.6                              | 9.9                    | .88      | NS*                      |
| 34   | 65.8                             | 70.0                              | 4.2                    | -.37     | NS                       |
| 35   | 58.5                             | 63.3                              | 4.8                    | -.40     | NS                       |
| 36   | 97.5                             | 96.6                              | .9                     | .22      | NS                       |
| 37   | 92.6                             | 10.0                              | 7.4                    | -1.52    | NS                       |
| 38   | 85.3                             | 93.3                              | 8.0                    | -1.05    | NS                       |
| 39   | 78.0                             | 76.6                              | 1.4                    | .13      | NS                       |
| 40   | 48.7                             | 66.6                              | 17.9                   | -1.50    | NS                       |

\*Not significant.

The two groups were basically in agreement on Supervisory duties for some full-time employees (Item 33), Supervisory duties for some part-time employees (Item 34), Hire assistant trainers (Item 35), Supervisory duties of student help (Item 36), Supervise and train student help (Item 37), Appoint student trainers (Item 38), Hire student trainers (Item 39), and Hold student trainer clinics (Item 40).

A study of the data presented in Table XXVII shows that Section 5 yielded non-significant t-ratios for each of the eight items, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Although the difference was not significant in any case, percentages reveal that more college

and university athletic directors recommend practice of seven of the eight items than is being practiced by the college and university athletic trainers.

TABLE XXVII

SUMMARY FOR PART I, SECTION 5 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON ATHLETIC  
TRAINING BUDGET

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|----------|--------------------------|
|      | N = 41                           | N = 30                            |                        |          |                          |
| 41   | 34.1                             | 36.6                              | 2.5                    | - .21    | NS*                      |
| 42   | 73.1                             | 90.0                              | 16.9                   | -1.76    | NS                       |
| 43   | 78.0                             | 86.6                              | 8.8                    | - .92    | NS                       |
| 44   | 87.8                             | 90.0                              | 2.2                    | - .28    | NS                       |
| 45   | 65.8                             | 73.3                              | 7.5                    | - .67    | NS                       |
| 46   | 90.2                             | 90.0                              | .2                     | .02      | NS                       |
| 47   | 29.2                             | 33.3                              | 4.1                    | - .36    | NS                       |
| 48   | 87.8                             | 90.0                              | 2.2                    | - .28    | NS                       |

\*Not significant.

The two groups were in basic agreement on Offer assistance in planning the physical education curriculum (Item 41), Maintain an annual budget (Item 42), Request that a budget be allotted for the care and prevention of athletic injuries at the school (Item 43), Responsible for budget expenditures for supplies (Item 44), Responsible for budget expenditures for medical treatments (Item 45), Order and check athletic training equipment and supplies (Item 46), Obtain approval of the team physician of any athletic training equipment and supplies purchased (Item 47), and Maintain

a standing and running inventory of the athletic training equipment and supplies (Item 48).

An examination of Table XXVIII indicates that Section 6 yielded non-significant t-ratios for each of the nine items,

TABLE XXVIII  
SUMMARY FOR PART I, SECTION 6 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
ATHLETIC EQUIPMENT

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|----------|--------------------------|
|      | N = 41                           | N = 30                            |                        |          |                          |
| 49   | 58.5                             | 60.0                              | 1.5                    | - .12    | NS*                      |
| 50   | 26.8                             | 13.3                              | 13.5                   | 1.37     | NS                       |
| 51   | 73.1                             | 56.6                              | 16.5                   | 1.45     | NS                       |
| 52   | 95.1                             | 93.3                              | 1.8                    | .32      | NS                       |
| 53   | 41.4                             | 56.6                              | 15.2                   | -1.26    | NS                       |
| 54   | 34.1                             | 36.6                              | 2.5                    | - .21    | NS                       |
| 55   | 17.0                             | 16.6                              | .4                     | .04      | NS                       |
| 56   | 85.3                             | 90.0                              | 4.7                    | .58      | NS                       |
| 57   | 95.1                             | 93.3                              | 2.2                    | .32      | NS                       |

\*Not significant.

thus the college and university athletic trainers and the college and university athletic directors were in basic agreement on these items. Although the difference was not significant in any case, a greater percentage of college and university athletic trainers reported practicing six of the nine items mentioned than was recommended by the group of college and university athletic directors.



Basic agreement between the two groups was indicated for Maintain records of athletic equipment and supplies (Item 49), Issue the athletes equipment such as shoulder pads, shoes, laundry, etc. (Item 50), Require all athletes to be fully dressed in a complete regulation uniform (Item 51), Require each player wear any special equipment which has been prepared for him (Item 52), Supervise a weekly check of each player's equipment to check on its working condition (Item 53), Supervise a check for broken or faulty permanent equipment such as dummies, sleds, basketball goals, etc. (Item 54), Repair athletic equipment such as shoulder pads, helmets, gloves, etc. (Item 55), Build safety equipment and injury protection pads (Item 56), and Advise coaches and the team physician in the selection of protective equipment for purchase and use in the athletic department (Item 57).

The data presented in Table XXIX indicates that Section 7 yielded non-significant  $t$ -ratios for each of the thirteen items, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Although the difference was not significant in any case, percentages reveal that more college and university athletic directors recommend practice of eight of the thirteen items than is being practiced by the college and university athletic trainers. One of the remaining five items has 100 per cent of each group responding in the affirmative.

TABLE XXIX

SUMMARY FOR PART I, SECTION 7 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
TRAINING ROOM

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|-------|--------------------------|
|      | N = 41                           | N = 30                            |                        |       |                          |
| 58   | 92.6                             | 93.3                              | .7                     | - .11 | NS*                      |
| 59   | 78.0                             | 86.6                              | 8.6                    | - .92 | NS                       |
| 60   | 97.5                             | 90.0                              | 7.5                    | 1.34  | NS                       |
| 61   | 95.1                             | 100.0                             | 4.9                    | -1.22 | NS                       |
| 62   | 97.5                             | 100.0                             | 2.5                    | - .87 | NS                       |
| 63   | 95.1                             | 100.0                             | 4.9                    | -1.22 | NS                       |
| 64   | 97.5                             | 100.0                             | 2.5                    | - .87 | NS                       |
| 65   | 100.0                            | 96.6                              | 3.4                    | 1.18  | NS                       |
| 66   | 43.9                             | 56.6                              | 12.7                   | -1.05 | NS                       |
| 67   | 26.8                             | 30.0                              | 3.2                    | - .29 | NS                       |
| 68   | 7.3                              | 6.6                               | .7                     | .11   | NS                       |
| 69   | 7.3                              | 3.3                               | 4.0                    | .72   | NS                       |
| 70   | 100.0                            | 100.0                             | 0.0                    | 0.00  | NS                       |

\*Not significant.

The two groups were basically in agreement on the following: Keep the athletic training quarters in an orderly and sanitary state (Item 58), Clean the athletic training room daily (Item 59), Advise proper authorities regarding the ready availability of the training room to enable them to have access to dressing rooms, entrances, athletic equipment, toilet facilities, and shower rooms, (Item 60), Advise proper authorities that the training room should supply adequate and proper illumination and lighting (Item 61), Advise proper authorities that the training room should provide adequate ventilation (Item 62), Advise proper authorities

that the size of the training room should be adequate (Item 63), Keep the equipment within the training room in proper working condition (Item 64), Provide storage areas for the athletic training supplies (Item 65), Provide a training room designed as a multipurpose room (Item 66), Provide late papers, magazines, and periodicals in the athletic training room for athletes to read (Item 67), Provide a place for players to study in the athletic training room (Item 68), Provide cots or beds in the athletic training room for the athlete who wants to stretch out for a rest (Item 69), and Keep first aid kits up to date and available (Item 70).

A study of the data presented in Table XXX shows that Section 8 yielded t-ratios for fifteen items which were not significant, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Significant t-ratios at greater than the .05 level were obtained for four other items. Although the difference was not significant in every case, percentages reveal that more college and university athletic directors recommended practice of eleven of the nineteen items than is being practiced by the college and university athletic trainers. Five of the remaining eight items had 100 per cent of each group to respond in the affirmative.

The two groups were basically in agreement on the following: Wear a white uniform in the athletic training room (Item 71), Wear a white uniform on the game field (Item 72),

TABLE XXX

SUMMARY FOR PART I, SECTION 8 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
ATTITUDE

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|-------|--------------------------|
|      | N = 41                           | N = 30                            |                        |       |                          |
| 71   | 56.0                             | 73.3                              | 17.3                   | -1.49 | NS*                      |
| 72   | 65.8                             | 73.3                              | 7.5                    | - .67 | NS                       |
| 73   | 70.7                             | 40.0                              | 30.7                   | 2.58  | .01                      |
| 74   | 70.7                             | 96.6                              | 25.9                   | -2.78 | .01                      |
| 75   | 12.1                             | 26.6                              | 14.5                   | -1.56 | NS                       |
| 76   | 12.1                             | 13.3                              | 1.2                    | - .15 | NS                       |
| 77   | 29.2                             | 43.3                              | 14.1                   | -1.22 | NS                       |
| 78   | 17.0                             | 26.6                              | 9.6                    | - .98 | NS                       |
| 79   | 65.8                             | 93.3                              | 27.5                   | -2.73 | .01                      |
| 80   | 92.6                             | 100.0                             | 7.4                    | -1.52 | NS                       |
| 81   | 100.0                            | 100.0                             | 00.0                   | 0.00  | NS                       |
| 82   | 100.0                            | 100.0                             | 00.0                   | 0.00  | NS                       |
| 83   | 100.0                            | 100.0                             | 00.0                   | 0.00  | NS                       |
| 84   | 100.0                            | 100.0                             | 00.0                   | 0.00  | NS                       |
| 85   | 100.0                            | 100.0                             | 00.0                   | 0.00  | NS                       |
| 86   | 100.0                            | 83.3                              | 16.7                   | 2.71  | .01                      |
| 87   | 97.5                             | 93.3                              | 4.2                    | .86   | NS                       |
| 88   | 92.6                             | 100.0                             | 7.4                    | -1.52 | NS                       |
| 89   | 73.1                             | 76.6                              | 3.2                    | - .33 | NS                       |

\*Not significant.

Member of the American Physical Therapy Association (Item 75), Member of the American Registry of Physical Therapists (Item 76), Member of the American Association for Health, Physical Education, and Recreation (Item 77), Member of the American College of Sports Medicine (Item 78), Know escape mechanisms used by an injured athlete (Item 80), Help the athlete to face his problems whether they be psychological or emotional (Item 81), Help the athlete to act in a

constructive manner in overcoming his problems (Item 82), Be realistic in considering the aches and pains of the athletes (Item 83), Have a genuine interest in the team and its individuals (Item 84), On request, counsel coaches and/or players regarding conditioning, staleness, exercise, nutrition, protective equipment, and similar matters (Item 85), Help develop motivation in the athletes (Item 87), Promote interest in the athletic training program to the school, team, and the community (Item 88), and Assume physical therapy duties for schools and communities in time of emergency (Item 89).

Disagreement was significant between the two groups at greater than the .01 level on Have the authority to discuss the injuries situation of the team with newswriters and commentators (Item 73) and Provide ego-support for the athletes (Item 86). A greater percentage of college and university athletic trainers were practicing the roles than the percentage of college and university athletic directors who recommended practice of the roles.

The two groups disagreed significantly at greater than the .01 level on Member of the National Athletic Trainers Association (Item 74) and Further formal education (Item 79). A higher percentage of college and university athletic directors recommended practice of the roles than the percentage of college and university athletic trainers who actually practiced the roles.

The data presented in Table XXXI indicated that Section 9 yielded t-ratios for sixteen items which were not

TABLE XXXI

SUMMARY FOR PART I, SECTION 9 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON TEAM  
PHYSICIAN RELATIONSHIP

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|----------|--------------------------|
|      | N = 41                           | N = 30                            |                        |          |                          |
| 90   | 90.2                             | 93.3                              | 3.1                    | - .46    | NS*                      |
| 91   | 73.1                             | 76.6                              | 3.5                    | - .33    | NS                       |
| 92   | 29.2                             | 43.3                              | 14.1                   | -1.22    | NS                       |
| 93   | 92.6                             | 86.6                              | 6.0                    | .83      | NS                       |
| 94   | 97.5                             | 96.6                              | .9                     | .22      | NS                       |
| 95   | 95.1                             | 100.0                             | 4.9                    | -1.22    | NS                       |
| 96   | 97.5                             | 100.0                             | 2.5                    | - .87    | NS                       |
| 97   | 82.9                             | 73.3                              | 9.6                    | .97      | NS                       |
| 98   | 80.4                             | 73.3                              | 7.1                    | .70      | NS                       |
| 99   | 65.8                             | 63.3                              | 2.5                    | .21      | NS                       |
| 100  | 36.5                             | 26.6                              | 9.9                    | .88      | NS                       |
| 101  | 100.0                            | 100.0                             | 00.0                   | 0.00     | NS                       |
| 102  | 73.1                             | 60.0                              | 13.9                   | 1.16     | NS                       |
| 103  | 92.6                             | 73.3                              | 19.3                   | 2.21     | .05                      |
| 104  | 26.8                             | 26.6                              | .2                     | .01      | NS                       |
| 105  | 78.0                             | 70.0                              | 8.0                    | .76      | NS                       |
| 106  | 97.5                             | 96.6                              | .9                     | .22      | NS                       |

\*Not significant.

significant, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. A significant t-ratio at greater than the .05 level was obtained for one item. Although the difference was significant in only one case, a greater percentage of college and university athletic trainers reported

practicing eleven of the seventeen items than was recommended by the group of college and university athletic directors. One of the remaining six items had 100 per cent of each group responding in the affirmative.

The two groups were found to be in basic agreement on Advise proper authorities to request attendance of the team physician at basketball contests (Item 91), Advise proper authorities to request attendance of the team physician at minor sport contests (Item 92), Advise proper authorities to request the team physician to be subject to call during practice hours (Item 93), Jointly responsible, with the team physician, the coach, and the administration, for the handling of athletic injuries (Item 95), Accept the responsibility for handling injuries which do not require the services of a team physician (Item 96), Have full responsibility for handling injuries occurring during practice sessions of contact sports (Item 97), Have full responsibility for handling injuries occurring during scrimmages in contact sports (Item 98), Have full responsibility for handling injuries occurring during games of contact sports (Item 99), Assume sole responsibility for the medical care of the athletes (Item 100), Provide first aid for injuries to athletes (Item 101), Transport athletes to the doctor in a private car if injured during practice (Item 102), Be allowed by the team physician to diagnose minor injuries (Item 104), Prescribe treatment following diagnosis (Item 105), and Provide follow-up treatment to athletic injuries (Item 106).

There was significant disagreement between the two groups at greater than the .05 level on Be allowed by the team physician to diagnose minor injuries (Item 103). A higher percentage of college and university athletic trainers were practicing the role than the percentage of college and university athletic directors who recommended practice of the role.

A study of the data presented in Table XXXII shows that Section 10 yielded non-significant t-ratios for each of the thirteen items, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Although the difference was not significant in any case, a greater percentage of college and university athletic trainers reported practicing eight of the thirteen items mentioned than was recommended by the group of college and university athletic directors. One of the remaining five items had 100 per cent of each group responding in the affirmative.

Basic agreement between the two groups was indicated on Examine all injured athletes before they leave the dressing room (Item 107), Be alert for injuries on the playing area at all times (Item 108), Request access to the health services of the school during practices and games (Item 109), Regularly give first aid treatment for injuries incurred in physical education or intramural activities (Item 110), Regularly give rehabilitative treatment to students incurring



TABLE XXXII

SUMMARY FOR PART I, SECTION 10 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON CARE  
AND TREATMENT OF INJURIES

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|----------|--------------------------|
|      | N = 41                           | N = 30                            |                        |          |                          |
| 107  | 92.6                             | 96.6                              | 4.0                    | - .71    | NS*                      |
| 108  | 100.0                            | 100.0                             | 0.0                    | 0.00     | NS                       |
| 109  | 75.6                             | 80.0                              | 2.4                    | 4.43     | NS                       |
| 110  | 43.9                             | 40.0                              | 3.9                    | .32      | NS                       |
| 111  | 31.7                             | 20.0                              | 11.7                   | 1.10     | NS                       |
| 112  | 26.8                             | 12.3                              | 13.5                   | 1.37     | NS                       |
| 113  | 85.3                             | 80.0                              | 5.3                    | .58      | NS                       |
| 114  | 63.4                             | 66.6                              | 3.2                    | - .27    | NS                       |
| 115  | 36.5                             | 40.0                              | 3.5                    | - .30    | NS                       |
| 116  | 46.3                             | 33.3                              | 13.0                   | 1.10     | NS                       |
| 117  | 70.7                             | 50.0                              | 20.7                   | 1.77     | NS                       |
| 118  | 19.5                             | 16.6                              | 2.9                    | .31      | NS                       |
| 119  | 12.1                             | 26.6                              | 14.5                   | -1.56    | NS                       |

\*Not significant.

injuries in a physical education or intramural activity (Item 111), Provide medical attention for spectators (Item 112), Arrange for the dietary supplements for athletes if necessary (Item 113), Responsible for the menu of the pre-game meal (Item 114), Responsible for supervision of the athletes' sleeping habits (Item 115), Dispense prescription medicine (Item 116), Dispense medication to be taken orally (Item 117), Give injections (Item 118), and Apply sutures for minor injuries if needed (Item 119).

The data for Section 11 yielded non-significant t-ratios for each of the ten items, indicating basic agreement between

the college and university athletic trainers and the college and university athletic directors as seen in Table XXXIII.

TABLE XXXIII

SUMMARY FOR PART I, SECTION 11 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
PREVENTION OF INJURIES

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|-------|--------------------------|
|      | N = 41                           | N = 30                            |                        |       |                          |
| 120  | 80.4                             | 90.0                              | 9.6                    | -1.10 | NS*                      |
| 121  | 100.0                            | 100.0                             | 0.0                    | 0.00  | NS                       |
| 122  | 92.6                             | 100.0                             | 7.4                    | -1.52 | NS                       |
| 123  | 100.0                            | 100.0                             | 0.0                    | 0.00  | NS                       |
| 124  | 100.0                            | 100.0                             | 0.0                    | 0.00  | NS                       |
| 125  | 90.2                             | 90.0                              | .2                     | .02   | NS                       |
| 126  | 51.2                             | 50.0                              | 1.2                    | .09   | NS                       |
| 127  | 43.9                             | 46.6                              | 2.7                    | -.22  | NS                       |
| 128  | 24.3                             | 26.6                              | 2.3                    | -.22  | NS                       |
| 129  | 43.9                             | 46.6                              | 2.7                    | -.22  | NS                       |

\*Not significant.

Although the difference was not significant in any case, percentages reveal that more college and university athletic directors recommended practice of five of the ten items than is being practiced by the college and university athletic trainers. Three of the remaining five items had 100 per cent of each group responding in the affirmative.

The two groups were basically in agreement on the following: Responsible for having, at contact sports, an ambulance on immediate call for all games (Item 120), Instruct all athletes to report all injuries (Item 121),

Give careful training and instruction to athletes to help prevent accidents (Item 122), Stress prevention of injuries (Item 123), Provide preventive taping and wrapping for the athletes (Item 124), Suggest to the coach that fatigued athletes be substituted for (Item 125), Organize and be responsible for the out-of-season conditioning program of the athletes (Item 126), Organize and be responsible for the weight training program of the athletes (Item 127), Supervise the warm-up of athletic teams before practice (Item 128), and Provide assistance to the coaches in organizing practice schedules (Item 129).

A study of the data presented in Table XXXIV shows that Section 12 yielded t-ratios for fifteen items which were not significant, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Significant t-ratios at greater than the .05 level were obtained for three other items, as indicated in Table XXXIV. Although the difference was rarely significant, percentages reveal that more college and university athletic directors recommend practice of ten of the eighteen items than is being practiced by the college and university athletic trainers.

The two groups were basically in agreement on the following: Send letters to each athlete during the summer months encouraging conditioning prior to September (Item 130), Responsible for knowing the health and medical history

TABLE XXXIV

SUMMARY FOR PART I, SECTION 12 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON HEALTH  
AND MEDICAL RECORDS

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|-------|--------------------------|
|      | N = 41                           | N = 30                            |                        |       |                          |
| 130  | 68.2                             | 53.3                              | 14.9                   | 1.27  | NS*                      |
| 131  | 87.8                             | 96.6                              | 8.8                    | -1.31 | NS                       |
| 132  | 39.0                             | 40.0                              | 1.0                    | - .08 | NS                       |
| 133  | 46.3                             | 23.3                              | 23.0                   | 1.98  | .05                      |
| 134  | 95.1                             | 93.3                              | 1.8                    | .32   | NS                       |
| 135  | 78.0                             | 83.3                              | 5.3                    | - .55 | NS                       |
| 136  | 53.6                             | 80.0                              | 26.4                   | -2.30 | .05                      |
| 137  | 85.3                             | 93.3                              | 8.0                    | -1.05 | NS                       |
| 138  | 60.9                             | 80.0                              | 19.1                   | -1.71 | NS                       |
| 139  | 63.4                             | 53.3                              | 10.1                   | .85   | NS                       |
| 140  | 73.1                             | 90.0                              | 16.9                   | -1.76 | NS                       |
| 141  | 82.9                             | 70.0                              | 7.1                    | 1.28  | NS                       |
| 142  | 48.7                             | 40.0                              | 8.7                    | .72   | NS                       |
| 143  | 36.5                             | 36.6                              | .1                     | - .00 | NS                       |
| 144  | 80.4                             | 70.0                              | 10.4                   | 1.01  | NS                       |
| 145  | 85.3                             | 90.0                              | 4.7                    | - .58 | NS                       |
| 146  | 85.3                             | 93.3                              | 8.0                    | -1.05 | NS                       |
| 147  | 100.0                            | 83.3                              | 16.7                   | 2.71  | .01                      |

\*Not significant.

of the athletes (Item 131), Obtain from each athlete a permit, signed by the parents, before the boy can participate in the athletic program (Item 132), Keep records of the injuries to athletes (Item 134), Maintain up-to-date health records (Item 135), Maintain a case history of the athletes' injuries while attending your school (Item 137), Fill out a standard accident report with pertinent information regarding any injury (Item 138), Responsible for notification of the

parents at the time of an athlete's injury (Item 139),  
Supervise the issuing of teeth protectors (Item 140), Have knowledge of medical and dental insurance (Item 141), Have possession of the insurance records (Item 142), Handle the insurance policies (Item 143), Advise proper authorities that each athlete should be properly protected by medical insurance (Item 144), Allow the team physician sole authority for determining the physical fitness of an athlete who wished to participate in the athletic program (Item 145), and Obtain the team physician's approval of each athlete before he participates in each sport (Item 146).

There was significant disagreement between the two groups at greater than the .01 level on Prohibit all forms of "horseplay" or other activities which might result in injury (Item 147). A higher percentage of college and university athletic trainers were practicing the role than the percentage of college and university athletic directors who recommended practice of the role.

Disagreement was significant between the two groups at greater than the .05 level on Appoint a team physician (Item 133). A greater percentage of college and university athletic trainers were practicing the role than the percentage of college and university athletic directors who recommended practice of the role.

The two groups disagreed significantly at greater than the .05 level on Maintain a case history of the athlete of

all injuries received prior to attending your school (Item 136). A higher percentage of college and university athletic directors recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

An examination of Table XXXV indicates that Section 13 yielded non-significant t-ratios for each of the three items,

TABLE XXXV

SUMMARY FOR PART I, SECTION 13 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
ATHLETIC FACILITIES

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|----------|--------------------------|
|      | N = 41                           | N = 30                            |                        |          |                          |
| 148  | 95.1                             | 93.3                              | 1.8                    | .32      | NS*                      |
| 149  | 7.3                              | 6.6                               | .7                     | .11      | NS                       |
| 150  | 14.6                             | 6.6                               | 8.0                    | 1.05     | NS                       |

\*Not significant.

therefore the college and university athletic trainers and the college and university athletic directors were basically in agreement on these items. Although the difference was not significant in any case, a greater percentage of college and university athletic trainers reported practicing each of the three items mentioned than was recommended by the group of college and university athletic directors.

Basic agreement between the two groups was indicated for the following: Eliminate all possible hazards by surveying dressing rooms, shower rooms, and playing areas (Item 148), Responsible for having the gymnasium cleaned (Item 149), and Responsible for the care of the athletic field (Item 150).

The data presented in Table XXXVI indicate that Section 14 yielded non-significant t-ratios for each of the six

TABLE XXXVI  
SUMMARY FOR PART I, SECTION 14 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
REHABILITATION

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | <u>t</u> | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|----------|--------------------------|
|      | N = 41                           | N = 30                            |                        |          |                          |
| 151  | 75.6                             | 83.3                              | 7.7                    | - .78    | NS*                      |
| 152  | 97.5                             | 100.0                             | 2.5                    | - .87    | NS                       |
| 153  | 92.6                             | 100.0                             | 7.4                    | -1.52    | NS                       |
| 154  | 92.6                             | 86.6                              | 6.0                    | .83      | NS                       |
| 155  | 29.2                             | 23.3                              | 5.9                    | .55      | NS                       |
| 156  | 90.2                             | 86.6                              | 3.6                    | .47      | NS                       |

\*Not significant.

items, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. There was no difference in the number of items practiced by a greater percentage of college and university athletic trainers and the number of items recommended by a greater percentage of college and university athletic directors.

The two groups were basically in agreement on the following: Maintain and utilize daily weight charts for all athletes (Item 151), Responsible for the rehabilitation of injuries to athletes (Item 152), Use the techniques of corrective and physical therapy under the direction of the team physician (Item 153), Responsible for the post-operative care of the athletes (Item 154), Responsible for making the final decision as to when an athlete should return to competition following a major injury (Item 155), and Responsible for making the final decision as to when an athlete should return to competition following a minor injury (Item 156).

A study of the data presented in Table XXXVII shows that Section 15 yielded t-ratios for seven items which were not significant, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Significant t-ratios at greater than the .05 level were obtained for three other items. Although the difference was usually not significant, a greater percentage of college and university athletic trainers reported practicing six of the ten items mentioned than was recommended by the group of college and university athletic directors.

The two groups were in basic agreement on the following: Provide the half-time refreshments for the team (Item 157), Provide an athletic training area for visiting team (Item 160), Provide a student trainer for visting team (Item 161),



TABLE XXXVII

SUMMARY FOR PART I, SECTION 15 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
ATHLETIC CONTESTS

| Item | Per Cent<br>Athletic<br>Trainers | Per Cent<br>Athletic<br>Directors | Per Cent<br>Difference | t     | Level of<br>Significance |
|------|----------------------------------|-----------------------------------|------------------------|-------|--------------------------|
|      | N = 41                           | N = 30                            |                        |       |                          |
| 157  | 85.3                             | 76.6                              | 8.7                    | .93   | NS*                      |
| 158  | 85.3                             | 63.3                              | 22.0                   | 2.14  | .05                      |
| 159  | 80.4                             | 90.0                              | 9.6                    | -1.10 | NS                       |
| 160  | 85.3                             | 83.3                              | 2.0                    | .22   | NS                       |
| 161  | 21.9                             | 36.6                              | 14.7                   | -1.36 | NS                       |
| 162  | 90.2                             | 90.0                              | .2                     | .02   | NS                       |
| 163  | 60.9                             | 33.3                              | 27.6                   | 2.29  | .05                      |
| 164  | 87.8                             | 100.0                             | 12.2                   | -1.98 | .05                      |
| 165  | 58.5                             | 70.0                              | 11.5                   | -.99  | NS                       |
| 166  | 39.0                             | 36.6                              | 2.4                    | .20   | NS                       |

\*Not significant.

Provide an athletic trainer for teams leaving the campus (Item 162), Accompany basketball teams on all trips (Item 165), and Accompany track teams on all trips (Item 166).

There was significant disagreement between the two groups at greater than the .05 level on Supervise the athletic team throughout an entire trip, except for the pre-game instructions and the direction during the game (Item 163). A higher percentage of college and university athletic trainers were practicing the role than the percentage of college and university athletic directors who recommended practice of the role.

Disagreement was significant between the two groups at greater than the .05 level on Provide the half-time refreshments for visiting team (Item 158) and Accompany football teams on all trips (Item 164). A higher percentage of college and university athletic directors recommended practice of the role than the percentage of college and university athletic trainers who actually practiced the role.

#### Summary of Data Related to Hypothesis II

Hypothesis II for the study indicated that each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, would differ significantly from the corresponding role recommended by college and university athletic directors in Texas and bordering states. The above hypothesis was decidedly rejected on the basis of the very few number of items with t-ratios which were significant at greater than the .05 level. A majority of the total items must have had significant t-ratios for the acceptance of the hypothesis.

A summary of the number of items having significant t-ratios, non-significant t-ratios, and the percentages of the total in each category is presented in Table XXXVIII.

An examination of Table XXXVIII shows that college and university athletic trainers and college and university athletic directors reported significant disagreement on only

TABLE XXXVIII

SUMMARY OF THE NUMBER AND PERCENTAGE OF ITEMS WITH SIGNIFICANT AND NON-SIGNIFICANT  $t$ -RATIOS FOR COLLEGE AND UNIVERSITY ATHLETIC TRAINERS AND COLLEGE AND UNIVERSITY ATHLETIC DIRECTORS (QUESTIONNAIRE: PART ONE)

| Description                            | Number | Percentage |
|--|--------|------------|
| Items with significant $t$ -ratios     | 13     | 7.83       |
| Items with non-significant $t$ -ratios | 153    | 92.17      |
| Total                                  | 166    | 100.00     |

7.83 per cent of the items at greater than the .05 level. Therefore, Hypothesis II was accepted for the following items:

- 20. Coach in the spring semester
- 26. Coach track
- 73. Have the authority to discuss the injuries situation of the team with newswriters and commentators
- 74. Member of the National Athletic Trainers Association.
- 79. Further formal education
- 86. Provide ego-support for the athletes
- 103. Be allowed by the team physician to diagnose minor injuries
- 133. Appoint a team physician
- 136. Maintain a case history of the athlete of all injuries received prior to attending your school

147. Prohibit all forms of "horseplay" or other activities which might result in injury
158. Provide the half-time refreshment for visiting team
163. Supervise the athletic team throughout an entire trip, except for the pre-game instructions and the direction during the game
164. Accompany football teams on all trips.

Hypothesis II was rejected for the remaining 153 items concerning the role of the college and university athletic trainer. For these items, there was no significant difference between the percentage of college and university athletic trainers practicing the role and the percentage of college and university athletic directors recommending practice of the role by college and university athletic trainers.

Data Related to Part Two, Sections 1  
Through 3 of the Questionnaire:  
Group I and Group II

Hypothesis III stated that the academic preparation received by college and university athletic trainers in Texas and bordering states would differ significantly from the undergraduate academic curriculum recommended by national athletic training specialists.

The data for Section 1 of Part Two yielded t-ratios for five items which were not significant, indicating basic agreement between the college and university athletic trainers and the national athletic training specialists.

Significant  $t$ -ratios at greater than the .05 level were obtained for five other items, as indicated by Table XXXIX.

TABLE XXXIX

SUMMARY FOR PART II, SECTION 1 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
UNDERGRADUATE DEGREES

| Item | Athletic Trainers<br>N = 41 |      | Athletic Training Specialists<br>N = 53 |      | $t$   | Level of Significance |
|------|-----------------------------|------|---|------|-------|-----------------------|
|      | M                           | S.D. | M                                       | S.D. |       |                       |
| 1    | 3.78                        | .46  | 3.77                                    | .81  | .04   | NS*                   |
| 2    | 1.73                        | .88  | 2.26                                    | .95  | -2.73 | .01                   |
| 3    | 1.46                        | .76  | 1.75                                    | .92  | -1.60 | NS                    |
| 4    | 1.87                        | 1.15 | 2.69                                    | 1.15 | -3.37 | .001                  |
| 5    | 1.78                        | 1.19 | 2.54                                    | 1.19 | -3.05 | .01                   |
| 6    | 2.48                        | 1.19 | 3.30                                    | .98  | -3.58 | .001                  |
| 7    | 3.63                        | .75  | 3.24                                    | 1.07 | 1.94  | NS                    |
| 8    | 2.65                        | 1.11 | 2.62                                    | .97  | .16   | NS                    |
| 9    | 2.31                        | 1.06 | 2.26                                    | .87  | .26   | NS                    |
| 10   | 2.43                        | 1.28 | 3.01                                    | 1.09 | -2.33 | .02                   |

\*Not significant.

Although not all were at a significant level, the group of national athletic training specialists recommended a greater mean level of emphasis on six of the ten items than the mean level received as reported by college and university athletic trainers.

The two groups were in agreement on the following items: Bachelor's Degree (Item 1), Pre-medical Degree (Item 3), Major in Physical Education (Item 7), Major in Health (Item 8), and Major in Biology (Item 9).

There was significant disagreement between the two groups at greater than the .001 level on Registered Physical Therapist Degree (Item 4) and Major in Athletic Training (Item 6). National athletic training specialists recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

There was significant disagreement between the two groups at greater than the .01 level on Corrective Therapy Degree (Item 2) and Certified Physical Therapy Degree (Item 5). National athletic training specialists recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups disagreed significantly at greater than the .02 level on Student teaching as an athletic trainer (Item 10). National athletic training specialists recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

A study of the data presented in Table XL shows that Section 2 yielded t-ratios for thirteen items which were not significant, indicating basic agreement between the college and university athletic trainers and the national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for five other items. Although

TABLE XL

SUMMARY FOR PART II, SECTION 2 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
ACADEMIC COURSES I

| Item | Athletic Trainers<br>N = 41 |      | Athletic Training Specialists<br>N = 53 |      | t     | Level of Significance |
|------|-----------------------------|------|---|------|-------|-----------------------|
|      | M                           | S.D. | M                                       | S.D. |       |                       |
| 11   | 3.29                        | 1.10 | 3.50                                    | .98  | - .99 | NS*                   |
| 12   | 3.09                        | 1.28 | 3.36                                    | .98  | -1.98 | .05                   |
| 13   | 3.00                        | 1.28 | 3.33                                    | 1.00 | -1.41 | NS                    |
| 14   | 3.04                        | 1.01 | 3.24                                    | 1.04 | - .90 | NS                    |
| 15   | 3.60                        | .79  | 3.69                                    | .83  | - .51 | NS                    |
| 16   | 3.51                        | .73  | 3.64                                    | .84  | - .76 | NS                    |
| 17   | 3.07                        | .83  | 2.90                                    | 1.10 | .79   | NS                    |
| 18   | 3.14                        | .95  | 3.22                                    | 1.07 | - .37 | NS                    |
| 19   | 1.92                        | .94  | 2.69                                    | 1.07 | -3.59 | .001                  |
| 20   | 1.90                        | 1.00 | 2.62                                    | 1.13 | -3.16 | .01                   |
| 21   | 1.90                        | .84  | 2.09                                    | 1.06 | - .93 | NS                    |
| 22   | 2.04                        | .96  | 1.73                                    | .78  | 1.72  | NS                    |
| 23   | 2.51                        | 1.06 | 3.05                                    | 1.08 | -2.40 | .02                   |
| 24   | 2.14                        | 1.02 | 2.05                                    | .91  | .44   | NS                    |
| 25   | 2.85                        | .87  | 2.83                                    | 1.00 | .11   | NS                    |
| 26   | 2.21                        | .92  | 2.41                                    | .99  | - .96 | NS                    |
| 27   | 2.46                        | 1.01 | 3.16                                    | .96  | -3.40 | .001                  |
| 28   | 3.09                        | .82  | 3.26                                    | .93  | - .89 | NS                    |

\*Not significant.

few were at a significant level, the group of national athletic training specialists recommended a greater mean level of emphasis on fourteen of the eighteen items than was actually received as reported by college and university athletic trainers.

Basic agreement between the two groups was indicated for the following: Instruction in the Red Cross Standard First Aid Course (Item 11), Instruction in the Red Cross

Instructors Course (Item 13), Instruction in human growth and development and its implications (Item 14), Instruction in human anatomy (Item 15), Instruction in human physiology (Item 16), Instruction in personal and community health (Item 17), Instruction in safety and accident prevention (Item 18), Instruction in genetics (Item 21), Instruction in economics (Item 22), Instruction in philosophy (Item 24), Instruction in psychology (Item 25), Instruction in sociology (Item 26), and Instruction in hygiene (Item 28).

There was significant disagreement between the two groups at greater than the .001 level on Instruction in psychiatry (Item 19) and Instruction in dietetics (Item 27). National athletic training specialists recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

Disagreement was significant between the two groups at greater than the .01 level on Instruction in neurology (Item 20). National athletic training specialists recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups disagreed significantly at greater than the .02 level on Instruction in legal liability problems in athletics (Item 23). National athletic training specialists recommended a higher mean level of emphasis on this experience



than the mean level of emphasis actually received as reported by college and university athletic trainers.

The data presented in Table XL indicates disagreement between the two groups significant at greater than the .05 level on Instruction in the Red Cross Advanced First Aid Course (Item 12). National athletic training specialists recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

The data for Section 3 yielded t-ratios for seven items which were not significant, indicating basic agreement between the college and university athletic trainers and the national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for twelve other items, as indicated in Table XLI. Although the difference was not significant in every case, national athletic training specialists recommended a greater mean level of emphasis on seventeen of the nineteen items than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups were basically in agreement on the following: Instruction in physical therapy (massage, hydrotherapy, and electro-therapy) (Item 32), Instruction in body mechanics (Item 37), Instruction in kinesiology (Item 38), Instruction in tests and measurements in physical education (Item 41), Instruction in athletic administration (Item 43),

TABLE XLI

SUMMARY FOR PART II, SECTION 3 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
ACADEMIC COURSES II

| Item | Athletic Trainers<br>N = 41 |      | Athletic Training Specialists<br>N = 53 |      | t     | Level of Significance |
|------|-----------------------------|------|---|------|-------|-----------------------|
|      | M                           | S.D. | M                                       | S.D. |       |                       |
| 29   | 3.46                        | .93  | 3.83                                    | .77  | -2.05 | .05                   |
| 30   | 3.34                        | 1.05 | 3.83                                    | .77  | -2.57 | .02                   |
| 31   | 3.46                        | .96  | 3.83                                    | .77  | -2.02 | .05                   |
| 32   | 3.31                        | .99  | 3.67                                    | .88  | -1.83 | NS*                   |
| 33   | 3.17                        | 1.00 | 3.67                                    | .86  | -2.60 | .01                   |
| 34   | 2.56                        | 1.21 | 3.32                                    | .96  | -3.34 | .001                  |
| 35   | 2.53                        | 1.06 | 3.03                                    | 1.00 | -2.30 | .05                   |
| 36   | 3.17                        | .85  | 3.67                                    | .86  | -2.81 | .01                   |
| 37   | 3.26                        | .76  | 3.47                                    | .92  | -1.12 | NS                    |
| 38   | 3.34                        | .84  | 3.50                                    | .94  | -.88  | NS                    |
| 39   | 2.21                        | 1.15 | 3.22                                    | 1.00 | -4.46 | .001                  |
| 40   | 1.92                        | 1.02 | 2.45                                    | 1.03 | -2.42 | .02                   |
| 41   | 2.85                        | 1.09 | 2.69                                    | 1.09 | -.67  | NS                    |
| 42   | 2.87                        | 1.06 | 2.33                                    | 1.00 | 2.47  | .02                   |
| 43   | 2.60                        | 1.07 | 2.69                                    | 1.02 | -.40  | NS                    |
| 44   | 2.53                        | 1.03 | 2.83                                    | 1.05 | -1.32 | NS                    |
| 45   | 1.68                        | .74  | 2.47                                    | 1.10 | -3.87 | .001                  |
| 46   | 2.29                        | 1.04 | 2.54                                    | 1.09 | -1.13 | NS                    |
| 47   | 2.21                        | 1.09 | 2.77                                    | 1.07 | -2.43 | .02                   |

\*Not significant.

Instruction in health administration (Item 44), and Instruction in chemistry (Item 46).

There was significant disagreement between the two groups at greater than the .001 level on Instruction in specialized therapeutics (Item 34), Instruction in research in sports medicine (Item 39), and Instruction in physics (Item 45). National athletic training specialists recommended

a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

Disagreement was significant between the two groups at greater than the .01 level on Instruction in rehabilitation (Item 33), and Instruction in conditioning of athletes (Item 36). National athletic training specialists recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups disagreed significantly at greater than the .02 level on Instruction in techniques of coaching (Item 42). National athletic training specialists recommended a lower mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

There was significant disagreement between the two groups at greater than the .02 level on Instruction in the role and duties of the athletic trainer (Item 30), Instruction in athletics for girls and women (Item 40), and Instruction about health center services (Item 47). National athletic training specialists recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

Disagreement was significant between the two groups at greater than the .05 level on Instruction in athletic training course (Item 29), Instruction in taping and bandaging (Item 31), and Instruction in budget and record keeping in athletics (Item 35). National athletic training specialists recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

#### Summary of Data Related to Hypothesis III

Hypothesis III for the study indicated that the academic preparation received by college and university athletic trainers in Texas and bordering states would differ significantly from the undergraduate academic curriculum recommended by national athletic training specialists. The hypothesis was partially rejected on the basis of the number of items with t-ratios which were significant at greater than the .05 level. A majority of the total items must have had significant t-ratios for the acceptance of the hypothesis.

A summary of the number of the items having significant t-ratios, non-significant t-ratios, and the percentages of the total in each category is presented in Table XLII.

An examination of Table XLII reveals that college and university athletic trainers and national athletic training specialists disagreed significantly on 46.81 per cent of the items at greater than the .05 level. Thus, Hypothesis III

TABLE XLII

SUMMARY OF THE NUMBER AND PERCENTAGE OF ITEMS WITH SIGNIFICANT AND NON-SIGNIFICANT  $t$ -RATIOS FOR COLLEGE AND UNIVERSITY ATHLETIC TRAINERS AND NATIONAL ATHLETIC TRAINING SPECIALISTS (QUESTIONNAIRE: PART TWO, ITEMS 1-47)

| Description                            | Number | Percentage |
|--|--------|------------|
| Items with significant $t$ -ratios     | 22     | 46.81      |
| Items with non-significant $t$ -ratios | 25     | 53.19      |
| Total                                  | 47     | 100.00     |

was accepted for the following items;

2. Corrective Therapy Degree
4. Registered Physical Therapist Degree
5. Certified Physical Therapist Degree
6. Major in Athletic Training
10. Student teaching as an athletic trainer
12. Instruction in the Red Cross Advanced First Aid Course
19. Instruction in psychiatry
20. Instruction in neurology
23. Instruction in legal liability problems in athletics
27. Instruction in dietetics
29. Instruction in an athletic training course
30. Instruction in the role and duties of the athletic trainer
31. Instruction in taping and bandaging

33. Instruction in rehabilitation
34. Instruction in specialized therapeutics
35. Instruction in budget and record keeping in athletics
36. Instruction in conditioning of athletes
39. Instruction in research in sports medicine
40. Instruction in athletics for girls and women
42. Instruction in techniques of coaching
45. Instruction in physics
47. Instruction about health center services.

Hypothesis III was rejected for the remaining twenty-five items concerning the academic experiences necessary in the undergraduate preparation of college and university athletic trainers. For these items, there was no significant difference between the mean levels of emphasis on the academic experiences received by college and university athletic trainers and the mean levels of emphasis on the academic experiences which were recommended by national athletic training specialists.

Data Related to Part Two, Sections 1  
Through 3 of the Questionnaire:  
Group I and Group III

It was stated in Hypothesis IV that the academic preparation received by college and university athletic trainers in Texas and bordering states would differ significantly from the undergraduate academic curriculum recommended by college and university athletic directors in Texas and bordering states.

The data for Section 1 of Part Two yielded  $t$ -ratios for seven items which were not significant, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Significant  $t$ -ratios at greater than the .05 level were obtained for three other items as indicated in Table XLIII. Although

TABLE XLIII

SUMMARY FOR PART II, SECTION 1 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
UNDERGRADUATE DEGREES

| Item | Athletic Trainers<br>N = 41 |      | Athletic Directors<br>N = 30 |      | $t$   | Level of Significance |
|------|-----------------------------|------|------------------------------|------|-------|-----------------------|
|      | M                           | S.D. | M                            | S.D. |       |                       |
| 1    | 3.78                        | .46  | 4.00                         | .00  | -2.52 | .02                   |
| 2    | 1.73                        | .88  | 2.13                         | .80  | -1.93 | NS*                   |
| 3    | 1.46                        | .76  | 1.80                         | .83  | -1.73 | NS                    |
| 4    | 1.87                        | 1.15 | 2.36                         | .98  | -1.85 | NS                    |
| 5    | 1.78                        | 1.19 | 2.20                         | .94  | -1.56 | NS                    |
| 6    | 2.48                        | 1.19 | 3.30                         | .69  | -3.29 | .001                  |
| 7    | 3.63                        | .75  | 3.70                         | .58  | -.39  | NS                    |
| 8    | 2.65                        | 1.11 | 3.06                         | .99  | -1.56 | NS                    |
| 9    | 2.31                        | 1.06 | 2.63                         | .94  | -1.27 | NS                    |
| 10   | 2.43                        | 1.28 | 3.03                         | .79  | -2.20 | .05                   |

\*Not significant.

the difference was usually not significant, college and university athletic directors recommended a greater mean level of emphasis on each of the ten items than the mean level of emphasis actually received as reported by college and university athletic trainers.

An examination of Table XLIII shows that the two groups were basically in agreement on Corrective Therapy Degree (Item 2), Pre-medical Degree (Item 3), Registered Physical Therapist Degree (Item 4), Certified Physical Therapist Degree (Item 5), Major in Physical Education (Item 7), Major in Health (Item 8), and Major in Biology (Item 9).

Disagreement between the two groups was significant at greater than the .001 level on Major in Athletic Training (Item 6). College and university athletic directors recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

There was significant disagreement between the two groups at greater than the .02 level on Bachelor's Degree (Item 1). College and university athletic directors recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups disagreed significantly at greater than the .05 level on Student teaching as an athletic trainer (Item 10). College and university athletic directors recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

A study of the data presented in Table XLIV shows that Section 2 yielded t-ratios for thirteen items which were not



TABLE XLIV

SUMMARY FOR PART II, SECTION 2 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
ACADEMIC COURSES I

| Item | Athletic Trainers<br>N = 41 |      | Athletic Directors<br>N = 30 |      | <u>t</u> | Level of Significance |
|------|-----------------------------|------|------------------------------|------|----------|-----------------------|
|      | M                           | S.D. | M                            | S.D. |          |                       |
| 11   | 3.29                        | 1.10 | 3.60                         | .66  | -1.33    | NS*                   |
| 12   | 3.09                        | 1.28 | 3.56                         | .66  | -1.80    | NS                    |
| 13   | 3.00                        | 1.28 | 3.33                         | .94  | -1.18    | NS                    |
| 14   | 3.04                        | 1.01 | 3.26                         | .99  | - .88    | NS                    |
| 15   | 3.60                        | .79  | 3.73                         | .51  | - .73    | NS                    |
| 16   | 3.51                        | .73  | 3.63                         | .54  | - .74    | NS                    |
| 17   | 3.07                        | .83  | 3.10                         | .78  | - .13    | NS                    |
| 18   | 3.14                        | .95  | 3.20                         | .74  | - .25    | NS                    |
| 19   | 1.92                        | .94  | 2.53                         | .99  | -2.57    | .02                   |
| 20   | 1.90                        | 1.00 | 2.43                         | 1.02 | -2.14    | .05                   |
| 21   | 1.90                        | .84  | 2.16                         | 1.06 | -1.14    | NS                    |
| 22   | 2.04                        | .96  | 2.23                         | .98  | - .77    | NS                    |
| 23   | 2.51                        | 1.06 | 2.90                         | .78  | -1.66    | NS                    |
| 24   | 2.14                        | 1.02 | 2.53                         | 1.11 | -1.49    | NS                    |
| 25   | 2.85                        | .87  | 3.00                         | 1.00 | - .64    | NS                    |
| 26   | 2.21                        | .92  | 2.76                         | .98  | -2.35    | .02                   |
| 27   | 2.46                        | 1.01 | 3.33                         | .64  | -4.06    | .001                  |
| 28   | 3.09                        | .82  | 3.53                         | .61  | -2.41    | .02                   |

\*Not significant.

significant, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Significant t-ratios at greater than the .05 level were obtained for five other items. Although the difference was usually not significant, college and university athletic directors recommended a greater mean level of emphasis on each of the eighteen items than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups basically agreed on Instruction the Red Cross Standard First Aid Course (Item 11), Instruction in the Red Cross Advanced First Aid Course (Item 12), Instruction in the Red Cross Instructors Course (Item 13), Instruction in human growth and development and its implication (Item 14), Instruction in human anatomy (Item 15), Instruction in human physiology (Item 16), Instruction in personal and community health (Item 17), Instruction in safety and accident prevention (Item 18), Instruction in genetics (Item 21), Instruction in economics (Item 22), Instruction in legal liability problems in athletics (Item 23), Instruction in philosophy (Item 24), and Instruction in psychology (Item 25).

There was significant disagreement between the two groups at greater than the .001 level on Instruction in dietetics (Item 27). College and university athletic directors recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

Disagreement between the two groups was significant at greater than the .02 level on Instruction in psychiatry (Item 19), Instruction in sociology (Item 26), and Instruction in hygiene (Item 28). College and university athletic directors recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

There was significant disagreement between the two groups at greater than the .05 level on Instruction in neurology (Item 20). College and university athletic directors recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

A study of the data presented in Table XLV shows that Section 3 yielded t-ratios for nine items which were not

TABLE XLV

SUMMARY FOR PART II, SECTION 3 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
ACADEMIC COURSES II

| Item | Athletic Trainers<br>N = 41 |      | Athletic Directors<br>N = 30 |      | <u>t</u> | Level of Significance |
|------|-----------------------------|------|------------------------------|------|----------|-----------------------|
|      | M                           | S.D. | M                            | S.D. |          |                       |
| 29   | 3.46                        | .93  | 3.90                         | .30  | -2.43    | .02                   |
| 30   | 3.34                        | 1.05 | 3.86                         | .42  | -2.55    | .02                   |
| 31   | 3.46                        | .96  | 3.93                         | .24  | -2.56    | .02                   |
| 32   | 3.31                        | .99  | 3.90                         | .30  | -3.05    | .01                   |
| 33   | 3.17                        | 1.00 | 3.76                         | .42  | -2.99    | .01                   |
| 34   | 2.56                        | 1.21 | 3.43                         | .71  | -3.47    | .001                  |
| 35   | 2.53                        | 1.06 | 2.96                         | .79  | -1.84    | NS*                   |
| 36   | 3.17                        | .85  | 3.56                         | .71  | -2.03    | .05                   |
| 37   | 3.26                        | .76  | 3.56                         | .71  | -1.64    | NS                    |
| 38   | 3.34                        | .84  | 3.63                         | .75  | -1.48    | NS                    |
| 39   | 2.21                        | 1.15 | 2.83                         | 1.00 | -2.29    | .05                   |
| 40   | 1.92                        | 1.02 | 2.10                         | .90  | .72      | NS                    |
| 41   | 2.85                        | 1.09 | 2.73                         | 1.06 | .45      | NS                    |
| 42   | 2.87                        | 1.06 | 2.30                         | .97  | 2.31     | .05                   |
| 43   | 2.60                        | 1.07 | 2.53                         | .95  | .30      | NS                    |
| 44   | 2.53                        | 1.03 | 2.60                         | 1.08 | .24      | NS                    |
| 45   | 1.68                        | .74  | 2.50                         | 1.20 | -3.46    | .001                  |
| 46   | 2.29                        | 1.04 | 2.70                         | 1.12 | -1.54    | NS                    |
| 47   | 2.21                        | 1.09 | 2.50                         | 1.05 | -1.06    | NS                    |

\*Not significant.

significant, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Significant  $t$ -ratios at greater than the .05 level were obtained for ten other items. Although the difference was not significant in every case, college and university athletic directors recommended a greater mean level of emphasis on sixteen of the nineteen items than the mean level of emphasis actually received as reported by college and university athletic trainers.

Basic agreement between the two groups was indicated for Instruction in budget and record keeping in athletics (Item 35), Instruction in body mechanics (Item 37), Instruction in kinesiology (Item 38), Instruction in athletics for girls and women (Item 40), Instruction in tests and measurements in physical education (Item 41), Instruction in athletic administration (Item 44), Instruction in chemistry (Item 46), and Instruction about health center services (Item 47).

Disagreement between the two groups was significant at greater than the .001 level on Instruction in specialized therapeutics (Item 34) and Instruction in physics (Item 45). College and university athletic directors recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

There was significant disagreement between the two groups at greater than the .01 level on Instruction in

Physical therapy (massage, hydrotherapy, and electrotherapy) (Item 32) and Instruction in rehabilitation (Item 33). College and university athletic directors recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

Disagreement was significant between the two groups at greater than the .02 level on Instruction in an athletic training course (Item 29), Instruction in role and duties of the athletic trainer (Item 30), and Instruction in taping and bandaging (Item 31). College and university athletic directors recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

There was significant disagreement between the two groups at greater than the .05 level on Instruction in techniques of coaching (Item 42). College and university athletic directors recommended a lower mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

An examination of Table XLV shows that disagreement between the two groups was significant at greater than the .05 level on Instruction in conditioning of athletes (Item 36) and Instruction in research in sports medicine (Item 39).

College and university athletic directors recommended a higher mean level of emphasis on these experiences than the mean level of emphasis actually received as reported by college and university athletic trainers.

#### Summary of Data Related to Hypothesis IV

Hypothesis IV for the study indicated that the academic preparation received by college and university athletic trainers in Texas and bordering states would differ significantly from the undergraduate academic curriculum recommended by college and university athletic directors in Texas and bordering states. The hypothesis was partially rejected on the basis of the limited number of items with t-ratios which were significant at greater than the .05 level. A majority of the total items must have had significant t-ratios for the acceptance of the hypothesis.

A summary of the number of items having significant t-ratios, non-significant t-ratios, and the percentages of the total in each category is presented in Table XLVI.

An examination of Table XLVI reveals that college and university athletic trainers and college and university athletic directors disagreed significantly on 38.30 per cent of the items at greater than the .05 level. Therefore, Hypothesis IV was accepted for the following items:

1. Bachelor's Degree
2. Major in Athletic Training

TABLE XLVI

SUMMARY OF THE NUMBER AND PERCENTAGE OF ITEMS WITH SIGNIFICANT AND NON-SIGNIFICANT  $t$ -RATIOS FOR COLLEGE AND UNIVERSITY ATHLETIC TRAINERS AND COLLEGE AND UNIVERSITY ATHLETIC DIRECTORS (QUESTIONNAIRE: PART TWO, ITEMS 1-47)

| Description                            | Number | Percentage |
|--|--------|------------|
| Items with significant $t$ -ratios     | 18     | 38.30      |
| Items with non-significant $t$ -ratios | 29     | 61.70      |
| Total                                  | 47     | 100.00     |

10. Student teaching as an athletic trainer
19. Instruction in psychiatry
20. Instruction in neurology
26. Instruction in sociology
27. Instruction in dietetics
28. Instruction in hygiene
29. Instruction in an athletic training course
30. Instruction in role and duties of the athletic trainer
31. Instruction in taping and bandaging
32. Instruction in physical therapy (massage, hydrotherapy, and electrotherapy)
33. Instruction in rehabilitation
34. Instruction in specialized therapeutics
36. Instruction in conditioning of athletes
39. Instruction in research in sports medicine

42. Instruction in techniques of coaching
45. Instruction in physics.

Hypothesis IV was rejected for the remaining twenty-nine items concerning the academic experiences necessary in the undergraduate preparation of college and university athletic trainers. For these items, there was no significant difference between the mean levels of emphasis on the academic experiences received by college and university athletic trainers and the mean levels of emphasis on the academic experiences which were recommended by college and university athletic directors.

Data Related to Part Two, Section 4  
and 5 of the Questionnaire:  
Group I and Group II

Hypothesis V stated that the undergraduate practical experience received by college and university athletic trainers in Texas and bordering states would differ significantly from the undergraduate practical experience recommended by national athletic training specialists.

The data for Section 4 of Part Two yielded t-ratios for five items which were not significant, indicating basic agreement between the college and university athletic trainers and national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for two items as indicated in Table XLVII. Although the difference was usually not significant, national athletic training specialists recommended a greater mean level of emphasis on



TABLE XLVII

SUMMARY FOR PART II, SECTION 4 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
STUDENT POSITION

| Item | Athletic Trainers<br>N = 41 |      | Athletic Training Specialists<br>N = 53 |      | <u>t</u> | Level of Significance |
|------|-----------------------------|------|---|------|----------|-----------------------|
|      | M                           | S.D. | M                                       | S.D. |          |                       |
| 48   | 3.39                        | 1.03 | 3.62                                    | .91  | -1.14    | NS*                   |
| 49   | 3.26                        | 1.14 | 3.62                                    | .91  | -1.64    | NS                    |
| 50   | 3.19                        | 1.21 | 3.58                                    | .92  | -1.75    | NS                    |
| 51   | 3.14                        | 1.18 | 3.45                                    | 1.00 | -1.34    | NS                    |
| 52   | 2.80                        | 1.29 | 3.33                                    | 1.04 | -2.19    | .05                   |
| 53   | 2.21                        | 1.23 | 2.07                                    | 1.11 | .58      | NS                    |
| 54   | 2.21                        | 1.25 | 2.81                                    | 1.09 | -2.40    | .02                   |

\*Not significant.

six of the seven items than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups were basically in agreement on Service as a student trainer (Item 48), Service as a student trainer with football (Item 49), Service as a student trainer with basketball (Item 50), Service as a student trainer with track (Item 51), and Service as a student equipment manager (Item 53).

There was significant disagreement between the two groups at greater than the .02 level on Service as a student trainer for local high school teams on their game nights (Item 54). National athletic training specialists recommended a higher mean level of emphasis on this experience

than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups disagreed significantly at greater than the .05 level on Service as a student trainer with the minor sports (baseball, tennis, golf, gymnastics, etc.) (Item 52). National athletic training specialists recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

The data for Section 5 of Part Two yielded t-ratios for eight items which were not significant, indicating basic agreement between the college and university athletic trainers and the national athletic training specialists. Significant t-ratios at greater than the .05 level were obtained for two other items, as indicated in Table XLVIII. Although the difference was usually not significant, national athletic training specialists recommended a greater mean level of emphasis on six of the ten items than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups were basically in agreement on the following: Experience in the rehabilitation of athletic injuries (Item 55), Experience with preventive and corrective taping (Item 56), Operate the athletic training modalities (Item 57), Practice massage techniques (Item 58), Travel with athletic teams (Item 59), Assist in taking the inventory

TABLE XLVIII

SUMMARY FOR PART II, SECTION 5 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP II ON  
STUDENT FUNCTION

| Item | Athletic Trainers<br>N = 41 |      | Athletic Training Specialists<br>N = 53 |      | $\bar{t}$ | Level of Significance |
|------|-----------------------------|------|---|------|-----------|-----------------------|
|      | M                           | S.D. | M                                       | S.D. |           |                       |
| 55   | 3.60                        | .72  | 3.75                                    | .79  | -.89      | NS*                   |
| 56   | 3.78                        | .46  | 3.81                                    | .77  | -.22      | NS                    |
| 57   | 3.65                        | .64  | 3.75                                    | .82  | -.60      | NS                    |
| 58   | 3.41                        | .79  | 3.39                                    | .97  | .09       | NS                    |
| 59   | 3.68                        | .71  | 3.69                                    | .83  | -.09      | NS                    |
| 60   | 3.24                        | .95  | 3.18                                    | 1.04 | .26       | NS                    |
| 61   | 3.02                        | 1.09 | 3.26                                    | 1.08 | -1.04     | NS                    |
| 62   | 1.90                        | 1.05 | 1.49                                    | .76  | 2.16      | .05                   |
| 63   | 3.09                        | 1.12 | 3.77                                    | .81  | -3.34     | .001                  |
| 64   | 2.43                        | 1.19 | 2.22                                    | 1.15 | .86       | NS                    |

\*Not significant.

(Item 60), Assist in allotting the athletic training budget for equipment and supplies (Item 61), and Participate in varsity athletics (Item 64).

There was significant disagreement between the two groups at greater than the .001 level on Attend athletic training clinics and conventions (Item 63). National athletic training specialists recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

The two groups disagreed significantly at greater than the .05 level on Assist with the athletic laundry (Item 62).

National athletic training specialists recommended a lower mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

#### Summary of Data Related to Hypothesis V

Hypothesis V for the study indicated that the undergraduate practical experience received by college and university athletic trainers in Texas and bordering states would differ significantly from the undergraduate practical experience recommended by national athletic training specialists. The hypothesis was decidedly rejected on the basis of the very few items with t-ratios which were significant at greater than the .05 level. A majority of the total items must have had significant t-ratios for the acceptance of the hypothesis.

A summary of the number of items having significant t-ratios, non-significant t-ratios, and the percentages of the total in each category is presented in Table XLIX.

An examination of Table XLIX shows that college and university athletic trainers and national athletic training specialists disagreed significantly on 23.53 per cent of the items at greater than the .05 level. Thus, Hypothesis V was accepted for the following items:

52. Service as a student trainer with the minor sports (baseball, tennis, golf, gymnastics, etc.)

TABLE XLIX

SUMMARY OF THE NUMBER AND PERCENTAGE OF ITEMS WITH SIGNIFICANT AND NON-SIGNIFICANT  $t$ -RATIOS FOR COLLEGE AND UNIVERSITY ATHLETIC TRAINERS AND NATIONAL ATHLETIC TRAINING SPECIALISTS (QUESTIONNAIRE: PART TWO, ITEMS 48-64)

| Description                            | Number | Percentage |
|--|--------|------------|
| Items with significant $t$ -ratios     | 4      | 23.53      |
| Items with non-significant $t$ -ratios | 13     | 76.47      |
| Total                                  | 17     | 100.00     |

54. Service as a student trainer for local high school teams on their game nights
62. Assist with the athletic laundry
63. Attend athletic training clinics and conventions.

Hypothesis V was rejected for the remaining thirteen items concerning the practical experiences necessary in the undergraduate preparation of college and university athletic trainers. For these items, there was no significant difference between the mean levels of emphasis on the practical experiences received by college and university athletic trainers and the mean levels of emphasis on the practical experiences which were recommended by national athletic training specialists.

Data Related to Part Two, Section 4  
and 5 of the Questionnaire:  
Group I and Group III

Hypothesis VI stated that the undergraduate practical experience received by college and university athletic trainers in Texas and bordering states would differ significantly from the undergraduate practical experience recommended by college and university athletic directors in Texas and bordering states.

The data for Section 4 of Part Two yielded non-significant t-ratios for each of the seven items, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Although the difference was not significant in any case, college and university athletic directors recommended a greater mean level of emphasis on six of the seven items than the mean level of emphasis actually received as reported by college and university athletic trainers as indicated in Table L.

The two groups were basically in agreement on the following: Service as a student trainer (Item 48), Service as a student trainer with football (Item 49), Service as a student trainer with basketball (Item 50), Service as a student trainer with track (Item 51), Service as a student trainer with the minor sports (baseball, tennis, golf, gymnastics, etc.) (Item 52), Service as a student equipment

TABLE L

SUMMARY FOR PART II, SECTION 4 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
STUDENT POSITION

| Item | Athletic Trainers<br>N = 41 |      | Athletic Directors<br>N = 30 |      | t     | Level of Significance |
|------|-----------------------------|------|------------------------------|------|-------|-----------------------|
|      | M                           | S.D. | M                            | S.D. |       |                       |
| 48   | 3.39                        | 1.03 | 3.56                         | .84  | - .75 | NS*                   |
| 49   | 3.26                        | 1.14 | 3.56                         | .84  | -1.18 | NS                    |
| 50   | 3.19                        | 1.21 | 3.46                         | .84  | -1.03 | NS                    |
| 51   | 3.14                        | 1.18 | 3.33                         | .90  | - .71 | NS                    |
| 52   | 2.80                        | 1.29 | 2.83                         | .89  | - .10 | NS                    |
| 53   | 2.21                        | 1.23 | 1.93                         | .81  | 1.08  | NS                    |
| 54   | 2.21                        | 1.25 | 3.66                         | .59  | - .34 | NS                    |

\*Not significant.

manager (Item 53), and Service as a student trainer for local high school teams on their game nights (Item 54).

A study of the data presented in Table LI shows that Section 5 yielded  $t$ -ratios for eight items which were not significant, indicating basic agreement between the college and university athletic trainers and the college and university athletic directors. Significant  $t$ -ratios at greater than the .05 level were obtained for two other items. Although the difference was usually not significant, college and university athletic directors recommended a greater mean level of emphasis on eight of the ten items than the mean level of emphasis actually received as reported by college and university athletic trainers.

TABLE LI

SUMMARY FOR PART II, SECTION 5 OF THE QUESTIONNAIRE:  
GROUP I AND GROUP III ON  
STUDENT FUNCTION

| Item | Athletic Trainers<br>N = 41 |      | Athletic Directors<br>N = 30 |      | t     | Level of Significance |
|------|-----------------------------|------|------------------------------|------|-------|-----------------------|
|      | M                           | S.D. | M                            | S.D. |       |                       |
| 55   | 3.60                        | .72  | 3.66                         | .59  | -.34  | NS*                   |
| 56   | 3.78                        | .46  | 3.96                         | .17  | -2.03 | .05                   |
| 57   | 3.65                        | .64  | 3.80                         | .40  | -1.04 | NS                    |
| 58   | 3.41                        | .79  | 3.63                         | .60  | -1.24 | NS                    |
| 59   | 3.68                        | .71  | 3.76                         | .42  | -.56  | NS                    |
| 60   | 3.24                        | .95  | 3.30                         | .73  | -.26  | NS                    |
| 61   | 3.02                        | 1.09 | 2.80                         | 1.13 | .82   | NS                    |
| 62   | 1.90                        | 1.05 | 1.76                         | .91  | .55   | NS                    |
| 63   | 3.09                        | 1.12 | 3.46                         | .61  | -1.60 | NS                    |
| 64   | 2.43                        | 1.19 | 1.86                         | .88  | 2.19  | .05                   |

\*Not significant.

Basic agreement between the two groups was indicated on the following: Experience in the rehabilitation of athletic injuries (Item 55), Operate the athletic training modalities (Item 57), Practice massage techniques (Item 58), Travel with athletic teams (Item 59), Assist in taking the inventory (Item 60), Assist in allotting the athletic training budget for equipment and supplies (Item 61), Assist with the athletic laundry (Item 62), and Attend athletic training clinics and conventions (Item 63).

There was significant disagreement between the two groups at greater than the .05 level on Participate in varsity athletics (Item 64). College and university athletic



directors recommended a lower mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

The data presented in Table LI indicates disagreement between the two groups significant at greater than the .05 level on Experience with preventative and corrective taping (Item 56). College and university athletic directors recommended a higher mean level of emphasis on this experience than the mean level of emphasis actually received as reported by college and university athletic trainers.

#### Summary of Data Related to Hypothesis VI

Hypothesis VI for the study indicated that the undergraduate practical experience received by college and university athletic trainers in Texas and bordering states would differ significantly from the undergraduate practical experience recommended by college and university athletic directors in Texas and bordering states. The hypothesis was decidedly rejected on the basis of the limited number of items with t-ratios which were significant at greater than the .05 level. A majority of the total items must have had significant t-ratios for the acceptance of the hypothesis.

A summary of the number of items having significant t-ratios, non-significant t-ratios, and the percentages of the total in each category is presented in Table LII.

TABLE LII

SUMMARY OF THE NUMBER AND PERCENTAGE OF ITEMS WITH SIGNIFICANT AND NON-SIGNIFICANT  $t$ -RATIOS FOR COLLEGE AND UNIVERSITY ATHLETIC TRAINERS AND COLLEGE AND UNIVERSITY ATHLETIC DIRECTORS (QUESTIONNAIRE: PART TWO, ITEMS 48-64)

| Description                            | Number | Percentage |
|--|--------|------------|
| Items with significant $t$ -ratios     | 2      | 11.76      |
| Items with non-significant $t$ -ratios | 15     | 88.24      |
| Total                                  | 17     | 100.00     |

An examination of Table LII shows that college and university athletic trainers and college and university athletic directors reported significant differences on only 11.76 per cent of the items at greater than the .05 level of significance. Therefore, Hypothesis VI was accepted for the following items:

- 56. Experience with preventative and corrective taping
- 64. Participate in varsity athletics.

Hypothesis VI was rejected for the remaining fifteen items concerning the practical experiences necessary in the undergraduate preparation of college and university athletic trainers. For these items, there was no significant difference between the mean levels of emphasis on the practical experiences received by college and university athletic trainers and the mean levels of emphasis on the practical

experiences which were recommended by college and university athletic directors.

## CHAPTER V

### SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

#### Summary

One purpose of this study was to determine the role of the college and university athletic trainer in Texas and bordering states, and to compare the role reported by the athletic trainers with the role recommended by each of two groups: national athletic training specialists and college and university athletic directors in Texas and bordering states. A second purpose was to determine the professional preparation received by college and university athletic trainers in Texas and bordering states and to compare the professional preparation reported by the athletic trainers with the professional preparation recommended by two groups: national athletic training specialists and college and university athletic directors in Texas and bordering states. Finally, a third purpose was to propose suggestions and guidelines which would be appropriate in developing an undergraduate degree program in the field of athletic training.

The instrument used in the study was constructed after surveying the literature pertaining to the field of athletic training. The validity of the questionnaire was established by having a panel of seven educators evaluate each item for

its appropriateness. It was arbitrarily decided that agreement by four of the seven judges was necessary for an item to be valid and retained in the questionnaire. A minimum of four panel members agreed on each item. Therefore, the original questionnaire was kept intact. The final form of the questionnaire was completed and returned by forty-one college and university athletic trainers in Texas and bordering states, fifty-five national athletic training specialists, and thirty college and university athletic directors in Texas and bordering states. The college and university athletic trainers were asked to indicate the role they actually practiced and the degree of emphasis that was received while an undergraduate student on the professional preparation areas included in the study. The national athletic training specialists and college and university athletic directors were asked to indicate the role and the degree of emphasis on the professional preparation areas they recommended for each area included in the study.

The t-technique was employed to determine whether or not significant differences existed between the roles reported being practiced by the college and university athletic trainers and the roles recommended by each of the two groups: national athletic training specialists and college and university athletic directors. The t-technique was also used to determine if there were significant differences between the undergraduate professional preparation received

as reported by college and university athletic trainers and the degree of emphasis on the professional preparation areas recommended by two groups: national athletic training specialists and college and university athletic directors.

Hypothesis I stated that each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, will differ significantly from the corresponding role recommended by national athletic training specialists. In testing Hypothesis I it was found that less than 50 per cent of the items (29.52 per cent) yielded  $t$ -ratios significant at greater than the .05 level. Therefore, Hypothesis I was rejected. There was not a significant difference between the two groups.

Hypothesis II stated that each of the existing roles of the college and university athletic trainers, as reported by athletic trainers in Texas and bordering states, will differ significantly from the corresponding role recommended by college and university athletic directors in Texas and bordering states. In testing Hypothesis II, less than 50 per cent of the items (7.82 per cent) yielded  $t$ -ratios which were significant at greater than the .05 level. Therefore, Hypothesis II was rejected. There was not a significant difference between the two groups.

Hypothesis III stated that the academic preparation received by college and university athletic trainers in

Texas and bordering states will differ significantly from the undergraduate academic curriculum recommended by national athletic training specialists. In testing Hypothesis III less than 50 per cent of the items (46.81 per cent) yielded  $t$ -ratios which were significant at greater than the .05 level. Therefore, Hypothesis III was rejected. There was not a significant difference between the two groups.

Hypothesis IV stated that the academic preparation received by college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate academic curriculum recommended by college and university athletic directors in Texas and bordering states. In testing Hypothesis IV less than 50 per cent of the items (38.30 per cent) yielded  $t$ -ratios which were significant at greater than the .05 level. Therefore, Hypothesis IV was rejected. There was not a significant difference between the two groups.

Hypothesis V stated that the undergraduate practical experience received by college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate practical experience recommended by national athletic training specialists. In testing Hypothesis V, less than 50 per cent of the items (23.53 per cent) yielded  $t$ -ratios which were significant at greater than the .05 level. Therefore, Hypothesis V was rejected.

There was not a significant difference between the two groups.

Hypothesis VI stated that the undergraduate practical experience received by college and university athletic trainers in Texas and bordering states will differ significantly from the undergraduate practical experience recommended by college and university athletic directors in Texas and bordering states. In testing Hypothesis VI, it was found that less than 50 per cent of the items (11.76 per cent) yielded t-ratios which were significant at greater than the .05 level. Therefore, Hypothesis VI was rejected. There was not a significant difference between the two groups.

While it was found in each hypothesis that less than 50 per cent of the items yielded t-ratios which were significant at greater than the .05 level, there was a significant difference between the groups on several items within each area of the questionnaire. On the basis of these findings, conclusions, implications, and recommendations were formulated.

### Conclusions

The following conclusions were drawn from an analysis of the findings of the study:

1. College and university athletic trainers in Texas and bordering states are practicing the role recommended by national athletic training specialists.



2. College and university athletic trainers in Texas and bordering states are practicing the role recommended by college and university athletic directors in Texas and bordering states.

3. College and university athletic trainers in Texas and bordering states basically have been educated in the undergraduate academic areas as seen desirable by national athletic training specialists.

4. College and university athletic trainers in Texas and bordering states basically have been educated in the undergraduate academic areas as seen desirable by college and university athletic directors in Texas and bordering states.

5. College and university athletic trainers in Texas and bordering states have basically had the essential practical experiences as recommended by national athletic training specialists.

6. College and university athletic trainers in Texas and bordering states have basically had the essential practical experiences as recommended by college and university athletic directors in Texas and bordering states.

7. The role practiced by college and university athletic trainers in Texas and bordering states tends to agree more with the role recommended by college and university athletic directors than with the role recommended by national athletic training specialists.

8. The undergraduate academic professional preparation received by college and university athletic trainers in Texas and bordering states tends to agree more with the undergraduate academic preparation recommended by college and university athletic directors than with the undergraduate academic preparation recommended by national athletic training specialists.

9. The undergraduate practical experiences practiced by college and university athletic trainers in Texas and bordering states tend to agree more with the undergraduate practical experiences recommended by college and university athletic directors than with the undergraduate practical experiences recommended by national athletic training specialists.

#### Implications

The data presented in this study have the following implications:

1. A college or university athletic director, in hiring an athletic trainer, usually approves the applicant who more nearly has had the educational background most conducive with his philosophy of the education of the athletic trainer.

2. A college or university athletic director, after hiring an athletic trainer, usually delegates responsibility to the athletic trainer in terms of his concept of the role of the athletic trainer.

Recommendations of Suggestions and Guidelines  
for an Undergraduate Program in  
Athletic Training

Suggestions and guidelines which would be appropriate in developing an undergraduate degree program in the field of athletic training are given below. These proposals were identified through an interpretation of the responses from the three groups included in the study.

1. A major in athletic training is recommended with the second teaching field chosen from physical education, health, biology, or physical therapy.

2. The course of study should include the necessary prerequisites leading to teacher certification in the respective state where the athletic trainer resides.

3. The course of study should include those requirements necessary for the athletic trainer to enter a school of physical therapy after graduation if he so desires.

4. The student teaching experience should include actual practices or experiences as a public school athletic trainer under the supervision of a head athletic trainer from the college or university. The student teaching experience should also include work in a second teaching field.

5. Concepts received from a general study of human anatomy should be considered as important. A study of the human body in terms of bones, muscles, and internal organs is recommended.

6. Through a study of human physiology there should be discussion concerning digestion, metabolism, the nervous system, glands of internal secretion, respiration, and circulation.

7. There should be a study of physiology of the human body with regard to exercise performance, need, capability, and capacity. The study should include the effects of exercise on the human body and the values and limitations of exercises and physical activity in human behavior and health.

8. There should be a study of the fundamental principles of inorganic and organic chemistry needed for the understanding of the chemistry of foods, muscles, blood, respiration, urine, and hormones.

9. Through a study of human growth and development there should be emphasis on the general psychological principles of perception, motivation, learning, and forgetting. The physical, mental, emotional, social, and moral characteristics of the child should also be emphasized.

10. Principles of individual differences and theories of learning should be emphasized in a study of the psychological bases of the educative process.

11. A study designed to introduce the student to the science of human society, the fundamental concepts, description, and socialization process is recommended.

12. Emphasis should be given to a study of the basic problems and types of philosophy with special emphasis upon

the problems of knowledge and nature of reality concerning the philosophy of education.

13. A study of home accidents and prevention to fulfill the requirements for an instructor's rating in First Aid by the American Red Cross is recommended.

14. A study of kinesiology and body mechanics should emphasize the principles of human mechanics, muscular structure, action, and control.

15. There should be a study of the theory and skill behind the selection and use of general and specific conditioning activities for the development of physical fitness in athletes.

16. A study of past and present sports medicine research on the effects of activity on the human body is recommended.

17. The principles and problems of healthful living as they apply today with special emphasis on the environmental conditions in the community, home, school, and the control of communicable diseases should be recommended for study.

18. There should be a thorough examination of all phases of competitive sports, including the coaching of football, basketball, baseball, and track.

19. Recommended for study is the organization and administration of the athletic program including interscholastic and intramural athletics. Emphasis should also

be placed on the legal liability problems of the athletic coach.

20. There should be a study of the fundamentals of human nutrition and diet. The development of a critical judgment of food fads and quackery and the scientific standards for meal planning and selection should be emphasized.

21. There should be study of the organization and administration of the school health program, including health services, healthful school living, and health education.

22. Through a thorough study in the field of athletic training, emphasis should be placed on the prevention of injuries, treatment of injuries, and rehabilitation of injuries. The trainer's duties and role, the athletic training room equipment and modalities, and athletic strapping and bandaging should also receive appropriate emphasis.

23. There should be actual instruction in and use of the various athletic training modalities.

24. The future athletic trainer should work a minimum of four semesters under the supervision of a qualified head athletic trainer of a college or university.

25. Experience as a student trainer should include work with all major sports, football, basketball, baseball, and track.

26. Experience as a student trainer should include work with a local high school team on game nights.

27. Consideration should be given to attending clinics or conventions which have as their program discussion concerning the field of athletic training.

#### Recommendations for Future Research

The following recommendations for future research are made on the basis of the findings and conclusions of the study:

1. Possibly several programs for a major in athletic training in various colleges and universities could be established. After several years a study could be conducted evaluating each program.
2. It is recommended that further research be conducted to determine the appropriate student teaching experiences or practices necessary for the athletic trainer.
3. A study should be conducted to determine any significant differences in the role and/or professional education of college and university athletic trainers in different parts of the United States.
4. Investigation is recommended to compare the roles which college and university athletic trainers are actually practicing with those perceived by the athletic trainers as the most important.
5. A similar study should be conducted with high school athletic trainers and the high school athletic directors.

6. Additional investigation is needed to determine the appropriateness of study in the field of physical therapy for the athletic trainer.

7. It is recommended that further research in the area should be conducted to determine appropriate materials and procedures for the effective development of a program in athletic training.

8. Additional investigation is needed to determine which past experiences of the college and university athletic directors contributed to the development of the concepts reported by the athletic directors in the study.



## APPENDIX A

### SAMPLE LETTER TO REQUEST A STUDY OF THE VALIDITY OF THE INSTRUMENT

Your help is requested in establishing the validity of a questionnaire to be used as part of a doctoral dissertation at North Texas State University. The study concerns the role and professional preparation of the college and university athletic trainer. It will survey the college and university athletic trainers in Texas and bordering states to determine the role they undertake and the degree of emphasis which was placed on indicated areas as they prepared themselves for the athletic training profession. This study will also be concerned with what ought to be the role of the athletic trainer and what ought to be the optimum degree of emphasis of the areas concerning the professional preparation of the athletic trainer. To obtain this information, a sample of college and university athletic directors in Texas and bordering states and national athletic training specialists will be asked to respond to the questionnaire after additions and corrections have been made from your responses.

As you direct yourself to the questionnaire, attempt to decide whether or not each of the items will provide the researcher with the needed information. In Part One, if the item indicates what could be the role of an athletic trainer, and is sufficiently clear, please circle the "1" in the left hand margin on the questionnaire. If you cannot decide, circle the "2." If the item appears unclear, or, for some other reason does not get at the above problem, please circle the "3." In Part Two you will be deciding if the item indicates what could be an experience necessary in preparing someone for the athletic training profession. Follow the same instructions for validation of each item stated for Part One above.

To obtain maximum validity of the questionnaire, suggestions of additional items would be appreciated if you find a significant area to have been excluded. A sheet is provided for this purpose. These items will be compiled with items added by other members of the validity panel and returned to you for your further consideration.

After you have completed the questionnaire, please return it in the enclosed self-addressed envelope. This study is being conducted under the auspices of the Southwest Athletic Trainers Association. Your cooperation in this study is greatly appreciated.

Sincerely,

Bobby Patton  
Head Athletic Trainer  
Southwest Texas State College  
San Marcos, Texas

Dear Fellow Educator:

May I add my support to Mr. Patton's request for your help? His advisory committee, composed of faculty members in both Physical Education and College Teaching, feels that this study can make a significant contribution to the preparation of athletic trainers. Your contribution will be valuable to this study.

Sincerely

L. Fred Thomas  
Associate Professor  
Chairman of the Advisory  
Committee  
North Texas State University  
Denton, Texas

APPENDIX B

SAMPLE LETTER TO OBTAIN DATA FROM THE THREE GROUPS

Your help is solicited in a study of the manner in which three influential groups report and perceive the role of the college and university athletic trainer. Also to be considered will be the degree of emphasis of selected experience areas of undergraduate professional preparation for the occupation of athletic trainer. These three groups, whose points of view are greatly influential in determining the actual role of the athletic trainer and how he will be educated, include:

- (1) All full-time college and university athletic trainers in Texas and bordering states;
- (2) All college and university athletic directors in Texas and bordering states who have a full-time athletic trainer on their staff; and,
- (3) A panel of national authorities whose experience and leadership help to establish the theoretical basis for this field.

Your completion and return of the instrument in the enclosed stamped envelope will be an important contribution to the study. The study is being conducted as part of the requirements for a doctoral dissertation at North Texas State University. Thank you for your help in considering this problem which is of great importance to our profession.

Sincerely,

Bobby Patton  
Head Athletic Trainer  
Southwest Texas State College  
San Marcos, Texas

This study is being conducted under the auspices of the Southwest Athletic Trainers Association. We would appreciate your attention to this study.

Sam Ketcham, President  
Southwest Athletic Trainers  
Association  
Baylor University  
Waco, Texas

APPENDIX C

MEMORANDUM

Date \_\_\_\_\_

To \_\_\_\_\_ From \_\_\_\_\_

Several days ago you received a questionnaire concerning the role of the college and university athletic trainer. As of this date I have not received the completed questionnaire in return mail. I ask you again to please respond to the questionnaire and return it. Another copy of the instrument is enclosed if you have misplaced the original copy. Thank you for your cooperation.

APPENDIX D

THE ORIGINAL QUESTIONNAIRE

THE ROLE OF THE COLLEGE AND  
UNIVERSITY ATHLETIC TRAINER IN  
TEXAS AND BORDERING STATES

Validity Study\*

Part One

The Role

As an athletic trainer in Texas or bordering states you are asked to respond to Part One by circling the appropriate alternative in regard to your role as athletic trainer.

Yes This item is one of my roles as a college or university athletic trainer.

No This item is not one of my roles as a college or university athletic trainer.

As an athletic director in Texas or bordering states or a national athletic training specialist you are asked to respond to Part One by circling the appropriate alternative in regard to your perception of the role of the athletic trainer.

Yes This item ought to be a role of the college and university athletic trainer.

No This item ought not to be a role of the college and university athletic trainer.

---

Validity  
Responses\*

|   |   |    |  |     |    |
|---|---|----|--|-----|----|
| 1 | 2 | 3* | 1. Directly responsible to the athletic director | yes | no |
| 1 | 2 | 3  | 2. Directly responsible to the school physician  | yes | no |

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\*Typed in red on original questionnaire.

|   |   |   |  |     |    |
|---|---|---|--|-----|----|
| 1 | 2 | 3 | 3. Directly responsible to the head coach of each sport                  | yes | no |
| 1 | 2 | 3 | 4. Directly responsible to the head of the physical education department | yes | no |
| 1 | 2 | 3 | 5. A full-time athletic trainer with no teaching or coaching duties      | yes | no |
| 1 | 2 | 3 | 6. A full-time athletic trainer with teaching duties                     | yes | no |
| 1 | 2 | 3 | 7. A full-time athletic trainer with coaching duties                     | yes | no |
| 1 | 2 | 3 | 8. A full-time athletic trainer with teaching and coaching duties        | yes | no |
| 1 | 2 | 3 | 9. Teach in the spring semester  | yes | no |
| 1 | 2 | 3 | 10. Teach in the fall semester   | yes | no |
| 1 | 2 | 3 | 11. Teach in the summer session  | yes | no |
| 1 | 2 | 3 | 12. Teach a course in the care and prevention of athletic injuries       | yes | no |
| 1 | 2 | 3 | 13. Teach a course in first aid  | yes | no |
| 1 | 2 | 3 | 14. Teach a course in kinesiology  | yes | no |
| 1 | 2 | 3 | 15. Teach a course in health and safety                                  | yes | no |
| 1 | 2 | 3 | 16. Teach a course in physiology of exercise                             | yes | no |
| 1 | 2 | 3 | 17. Teach a course in therapeutic techniques                             | yes | no |
| 1 | 2 | 3 | 18. Teach a course in required physical education activities             | yes | no |
| 1 | 2 | 3 | 19. Coach in the fall semester   | yes | no |
| 1 | 2 | 3 | 20. Coach in the spring semester   | yes | no |
| 1 | 2 | 3 | 21. Coach in the summer session  | yes | no |
| 1 | 2 | 3 | 22. Coach basketball   | yes | no |
| 1 | 2 | 3 | 23. Coach football   | yes | no |
| 1 | 2 | 3 | 24. Coach baseball   | yes | no |
| 1 | 2 | 3 | 25. Coach cross country  | yes | no |
| 1 | 2 | 3 | 26. Coach track  | yes | no |
| 1 | 2 | 3 | 27. Coach golf   | yes | no |
| 1 | 2 | 3 | 28. Coach gymnastics   | yes | no |
| 1 | 2 | 3 | 29. Coach soccer   | yes | no |
| 1 | 2 | 3 | 30. Coach swimming   | yes | no |
| 1 | 2 | 3 | 31. Coach tennis   | yes | no |
| 1 | 2 | 3 | 32. Other sports (specify) _____   | yes | no |
| 1 | 2 | 3 | 33. Supervisory duties for some full-time employees                      | yes | no |
| 1 | 2 | 3 | 34. Supervisory duties for some part-time employees                      | yes | no |
| 1 | 2 | 3 | 35. Hire assistant athletic trainers                                     | yes | no |
| 1 | 2 | 3 | 36. Supervisory duties of student help                                   | yes | no |
| 1 | 2 | 3 | 37. Supervise and train student trainers                                 | yes | no |
| 1 | 2 | 3 | 38. Appoint student trainers   | yes | no |
| 1 | 2 | 3 | 39. Hire student trainers  | yes | no |
| 1 | 2 | 3 | 40. Hold student trainer clinics   | yes | no |
| 1 | 2 | 3 | 41. Offer assistance in planning the physical education curriculum       | yes | no |

|       |  |     |    |
|-------|--|-----|----|
| 1 2 3 | 42. Maintain an annual budget  | yes | no |
| 1 2 3 | 43. Request that a budget be allotted for the care and prevention of athletic injuries at the school   | yes | no |
| 1 2 3 | 44. Responsible for budget expenditures for supplies   | yes | no |
| 1 2 3 | 45. Responsible for budget expenditures for medical treatments   | yes | no |
| 1 2 3 | 46. Order and check athletic training equipment and supplies   | yes | no |
| 1 2 3 | 47. Obtain approval of the team physician of any athletic training equipment and supplies purchased  | yes | no |
| 1 2 3 | 48. Maintain a standing and running inventory of the athletic training equipment and supplies  | yes | no |
| 1 2 3 | 49. Maintain records of athletic equipment and supplies  | yes | no |
| 1 2 3 | 50. Issue the athletes' equipment such as shoulder pads, shoes, laundry, etc.  | yes | no |
| 1 2 3 | 51. Require all athletes to be fully dressed in a complete regulation uniform  | yes | no |
| 1 2 3 | 52. Require each player wear any special equipment which has been prepared for him   | yes | no |
| 1 2 3 | 53. Supervise a weekly check of each player's equipment to check on its working condition  | yes | no |
| 1 2 3 | 54. Supervise a check for broken or faulty permanent equipment such as dummies, sleds, basketball goals, etc.  | yes | no |
| 1 2 3 | 55. Repair athletic equipment such as shoulder pads, helmets, gloves, etc.   | yes | no |
| 1 2 3 | 56. Build safety equipment and injury protection pads  | yes | no |
| 1 2 3 | 57. Advise coaches and the team physician in the selecting of protective equipment for purchase and use in the athletic department   | yes | no |
| 1 2 3 | 58. Keep the athletic training quarters in an orderly and sanitary state   | yes | no |
| 1 2 3 | 59. Clean the athletic training room daily   | yes | no |
| 1 2 3 | 60. Advise proper authorities regarding the ready availability of the training rooms to enable them to have access to dressing rooms, entrances, athletic equipment, toilet facilities, and shower rooms | yes | no |
| 1 2 3 | 61. Advise proper authorities that the training room should supply adequate and proper illumination and lighting   | yes | no |

|   |   |   |  |     |    |
|---|---|---|--|-----|----|
| 1 | 2 | 3 | 62. Advise proper authorities that the training room should provide adequate ventilation                   | yes | no |
| 1 | 2 | 3 | 63. Advise proper authorities that the size of the training room should be adequate                        | yes | no |
| 1 | 2 | 3 | 64. Keep the equipment within the training room in proper working condition                                | yes | no |
| 1 | 2 | 3 | 65. Provide storage areas for the athletic training supplies   | yes | no |
| 1 | 2 | 3 | 66. Provide a training room designed as a multipurpose room  | yes | no |
| 1 | 2 | 3 | 67. Provide late papers, magazines, and periodicals in the athletic training room for athletes to read     | yes | no |
| 1 | 2 | 3 | 68. Provide a place for players to study in the athletic training room                                     | yes | no |
| 1 | 2 | 3 | 69. Provide cots or beds in the athletic training room for the athlete who wants to stretch out for a rest | yes | no |
| 1 | 2 | 3 | 70. Keep first aid kits up to date and available   | yes | no |
| 1 | 2 | 3 | 71. Wear a white uniform in the athletic training room   | yes | no |
| 1 | 2 | 3 | 72. Wear a white uniform on the game field   | yes | no |
| 1 | 2 | 3 | 73. Have the authority to discuss the injuries situation of the team with newswriters and commentators     | yes | no |
| 1 | 2 | 3 | 74. Member of the National Athletic Trainers Association   | yes | no |
| 1 | 2 | 3 | 75. Member of the American Physical Therapy Association  | yes | no |
| 1 | 2 | 3 | 76. Member of the American Registry of Physical Therapists   | yes | no |
| 1 | 2 | 3 | 77. Member of the American Association for Health, Physical Education, and Recreation                      | yes | no |
| 1 | 2 | 3 | 78. Member of the American College of Sports Medicine  | yes | no |
| 1 | 2 | 3 | 79. Further formal education   | yes | no |
| 1 | 2 | 3 | 80. Know escape mechanisms used by an injured athlete  | yes | no |
| 1 | 2 | 3 | 81. Help the athlete to face his problems whether they be psychological or emotional                       | yes | no |
| 1 | 2 | 3 | 82. Help the athlete to act in a constructive manner in overcoming his problems                            | yes | no |
| 1 | 2 | 3 | 83. Be realistic in considering the aches and pains of the athletes  | yes | no |
| 1 | 2 | 3 | 84. Have a genuine interest in the team and its individuals  | yes | no |



|   |   |   |  |     |    |
|---|---|---|--|-----|----|
| 1 | 2 | 3 | 85. On request, counsel coaches and/or players regarding conditioning, staleness, exercise, nutrition, protective equipment, and similar matters | yes | no |
| 1 | 2 | 3 | 86. Provide ego-support for the athletes   | yes | no |
| 1 | 2 | 3 | 87. Help develop motivation in the athletes  | yes | no |
| 1 | 2 | 3 | 88. Promote interest in the athletic training program to the school, team, and the community   | yes | no |
| 1 | 2 | 3 | 89. Assume physical therapy duties for schools and communities in time of emergency  | yes | no |
| 1 | 2 | 3 | 90. Advise proper authorities to request attendance of the team physician at football contests   | yes | no |
| 1 | 2 | 3 | 91. Advise proper authorities to request attendance of the team physician at basketball contests   | yes | no |
| 1 | 2 | 3 | 92. Advise proper authorities to request attendance of the team physician at minor sport contests  | yes | no |
| 1 | 2 | 3 | 93. Advise proper authorities to request the team physician to be subject to call during practice hours  | yes | no |
| 1 | 2 | 3 | 94. Jointly responsible, with the team physician, the coach, and the administration, for the handling of athletic injuries                       | yes | no |
| 1 | 2 | 3 | 95. Have a standard procedure for handling athletic injuries   | yes | no |
| 1 | 2 | 3 | 96. Accept the responsibility of handling injuries which do not require the services of a team physician   | yes | no |
| 1 | 2 | 3 | 97. Have full responsibility for handling injuries occurring during practice sessions of contact sports  | yes | no |
| 1 | 2 | 3 | 98. Have full responsibility for handling injuries occurring during scrimmages in contact sports   | yes | no |
| 1 | 2 | 3 | 99. Have full responsibility for handling injuries occurring during games of contact sports  | yes | no |
| 1 | 2 | 3 | 100. Assume sole responsibility for the medical care of the athletes   | yes | no |
| 1 | 2 | 3 | 101. Provide first aid for injuries to athletes  | yes | no |
| 1 | 2 | 3 | 102. Transport athletes to the doctor in a private car if injured during practice  | yes | no |
| 1 | 2 | 3 | 103. Be allowed by the team physician to diagnose minor injuries   | yes | no |

|   |   |   |  |     |    |
|---|---|---|--|-----|----|
| 1 | 2 | 3 | 104. Be allowed by the team physician to diagnose major injuries   | yes | no |
| 1 | 2 | 3 | 105. Prescribe treatment following diagnosis   | yes | no |
| 1 | 2 | 3 | 106. Provide follow-up treatment to athletic injuries  | yes | no |
| 1 | 2 | 3 | 107. Examine all injured athletes before they leave the dressing room  | yes | no |
| 1 | 2 | 3 | 108. Be alert for injuries on the playing area at all times  | yes | no |
| 1 | 2 | 3 | 109. Request access to the health services of the school during practices and games  | yes | no |
| 1 | 2 | 3 | 110. Regularly give first aid treatment for injuries incurred in physical education or intramural activities               | yes | no |
| 1 | 2 | 3 | 111. Regularly give rehabilitative treatment to students incurring injuries in a physical education or intramural activity | yes | no |
| 1 | 2 | 3 | 112. Provide medical attention for spectators  | yes | no |
| 1 | 2 | 3 | 113. Arrange for the dietary supplements for athletes if necessary   | yes | no |
| 1 | 2 | 3 | 114. Responsible for the menu of the pre-game meal   | yes | no |
| 1 | 2 | 3 | 115. Responsible for supervision of the athletes' sleeping habits  | yes | no |
| 1 | 2 | 3 | 116. Dispense prescription medicine  | yes | no |
| 1 | 2 | 3 | 117. Dispense medication to be taken orally  | yes | no |
| 1 | 2 | 3 | 118. Give injections   | yes | no |
| 1 | 2 | 3 | 119. Apply sutures for minor injuries if needed  | yes | no |
| 1 | 2 | 3 | 120. Responsible for having, at contact sports, an ambulance on immediate call for all games                               | yes | no |
| 1 | 2 | 3 | 121. Instruct all athletes to report all injuries  | yes | no |
| 1 | 2 | 3 | 122. Give careful training and instruction to athletes to help prevent accidents   | yes | no |
| 1 | 2 | 3 | 123. Stress prevention of injuries   | yes | no |
| 1 | 2 | 3 | 124. Provide preventive taping and wrapping for the athletes   | yes | no |
| 1 | 2 | 3 | 125. Suggest to the coach that fatigued athletes be substituted for  | yes | no |
| 1 | 2 | 3 | 126. Organize and be responsible for the out-of-season conditioning program of the athletes                                | yes | no |
| 1 | 2 | 3 | 127. Organize and be responsible for the weight training program of the athletes   | yes | no |
| 1 | 2 | 3 | 128. Supervise the warm-up of athletic teams before practice   | yes | no |
| 1 | 2 | 3 | 129. Provide assistance to the coaches in organizing practice schedules  | yes | no |

|   |   |   |      |  |     |    |
|---|---|---|------|--|-----|----|
| 1 | 2 | 3 | 130. | Send letters to each athlete during the summer months encouraging conditioning prior to September  | yes | no |
| 1 | 2 | 3 | 131. | Responsible for knowing the health and medical history of the athletes   | yes | no |
| 1 | 2 | 3 | 132. | Obtain from each athlete a permit, signed by the parents, before the boy can participate in the athletic program                             | yes | no |
| 1 | 2 | 3 | 133. | Appoint a team physician   | yes | no |
| 1 | 2 | 3 | 134. | Keep records of the injuries to athletes   | yes | no |
| 1 | 2 | 3 | 135. | Maintain up-to-date health records   | yes | no |
| 1 | 2 | 3 | 136. | Maintain a case history of the athlete of all injuries received prior to attending your school   | yes | no |
| 1 | 2 | 3 | 137. | Maintain a case history of the athletes' injuries while attending your school  | yes | no |
| 1 | 2 | 3 | 138. | Fill out a standard accident report with pertinent information regarding any injury  | yes | no |
| 1 | 2 | 3 | 139. | Responsible for notification of the parents at the time of an athlete's injury   | yes | no |
| 1 | 2 | 3 | 140. | Supervise the issuing of teeth protectors  | yes | no |
| 1 | 2 | 3 | 141. | Have knowledge of medical and dental insurance   | yes | no |
| 1 | 2 | 3 | 142. | Have possession of the insurance records   | yes | no |
| 1 | 2 | 3 | 143. | Handle the insurance policies  | yes | no |
| 1 | 2 | 3 | 144. | Advise proper authorities that each athlete should be properly protected by medical insurance  | yes | no |
| 1 | 2 | 3 | 145. | Allow the team physician sole authority for determining the physical fitness of an athlete who wished to participate in the athletic program | yes | no |
| 1 | 2 | 3 | 146. | Obtain the team physician's approval of each athlete before he participates in each sport  | yes | no |
| 1 | 2 | 3 | 147. | Prohibit all forms of "horseplay" or other activities which might result in injury   | yes | no |
| 1 | 2 | 3 | 148. | Eliminate all possible hazards by surveying dressing rooms, shower rooms, and playing areas  | yes | no |
| 1 | 2 | 3 | 149. | Responsible for having the gymnasium cleaned   | yes | no |
| 1 | 2 | 3 | 150. | Responsible for the care of the athletic field   | yes | no |

|   |   |   |      |   |     |    |
|---|---|---|------|---|-----|----|
| 1 | 2 | 3 | 151. | Maintain and utilize daily weight charts for all athletes   | yes | no |
| 1 | 2 | 3 | 152. | Responsible for the rehabilitation of injuries to athletes  | yes | no |
| 1 | 2 | 3 | 153. | Use the techniques of corrective and physical therapy under the direction of the team physician                               | yes | no |
| 1 | 2 | 3 | 154. | Responsible for the post-operative care of the athletes   | yes | no |
| 1 | 2 | 3 | 155. | Responsible for making the final decision as to when an athlete should return to competition following a major injury         | yes | no |
| 1 | 2 | 3 | 156. | Responsible for making the final decision as to when an athlete should return to competition following a minor injury         | yes | no |
| 1 | 2 | 3 | 157. | Provide the half-time refreshments for the team   | yes | no |
| 1 | 2 | 3 | 158. | Provide the half-time refreshments for visiting team  | yes | no |
| 1 | 2 | 3 | 159. | Provide an athletic training area for visiting team   | yes | no |
| 1 | 2 | 3 | 160. | Provide medical care for visiting team  | yes | no |
| 1 | 2 | 3 | 161. | Provide a student trainer for visting team  | yes | no |
| 1 | 2 | 3 | 162. | Provide an athletic trainer for teams leaving the campus  | yes | no |
| 1 | 2 | 3 | 163. | Supervise the athletic team throughout an entire trip, except for the pre-game instructions and the direction during the game | yes | no |
| 1 | 2 | 3 | 164. | Accompany football teams on all trips   | yes | no |
| 1 | 2 | 3 | 165. | Accompany basketball teams on all trips   | yes | no |
| 1 | 2 | 3 | 166. | Accompany track teams on all trips  | yes | no |

## Part Two

### Professional Preparation

As an athletic trainer in Texas or bordering states you are asked to respond to Part Two by circling the appropriate number of the rating scale in regard to your undergraduate professional preparation experiences.

- 4 Much emphasis (Type of degree held, extensive instruction in this area, broad experience in this area)

- 3 Some emphasis (Adequate coverage but with a minimum of emphasis, ample competencies obtained, a minimum of experience)
- 2 Little emphasis (Area considered but brief coverage, covered to some degree, little experience provided)
- 1 No emphasis (Degree not required or was omitted, not exposed to instruction in this area, no experience provided, area excluded)

As an athletic director in Texas or bordering states or national athletic training specialist you are asked to respond to Part Two by circling the appropriate number on the rating scale in regard to your perception of the undergraduate professional preparation of an athletic trainer.

- 4 Much emphasis (Type of degree necessary, extensive instruction, highly desirable experience or service, broad experiences)
- 3 Some emphasis (Ought to be adequately exposed to coverage, ample competencies necessary, a minimum of experience needed)
- 2 Little emphasis (Ought to be considered but not essential, brief coverage, little experiences necessary in this area, can be omitted)
- 1 No emphasis (Degree unnecessary or unimportant, ought to be omitted, no exposure to this area necessary, no experience needed)

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Validity  
Responses

|       |   |         |
|-------|---|---------|
| 1 2 3 | 1. Bachelors Degree                         | 4 3 2 1 |
| 1 2 3 | 2. Corrective Therapy Degree                | 4 3 2 1 |
| 1 2 3 | 3. Pre-medical Degree                       | 4 3 2 1 |
| 1 2 3 | 4. Registered Physical Therapist Degree     | 4 3 2 1 |
| 1 2 3 | 5. Certified Physical Therapist Degree      | 4 3 2 1 |
| 1 2 3 | 6. Major in Athletic Training               | 4 3 2 1 |
| 1 2 3 | 7. Major in Physical Education              | 4 3 2 1 |
| 1 2 3 | 8. Major in Health                          | 4 3 2 1 |
| 1 2 3 | 9. Major in Biology                         | 4 3 2 1 |
| 1 2 3 | 10. Student teaching as an athletic trainer | 4 3 2 1 |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 11. Instruction in the Red Cross Standard First Aid Course                      | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 12. Instruction in the Red Cross Advanced First Aid Course                      | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 13. Instruction in the Red Cross Instructors Course                             | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 14. Instruction in human growth and development and its implications            | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 15. Instruction in human anatomy  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 16. Instruction in human physiology   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 17. Instruction in personal and community health                                | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 18. Instruction in safety and accident prevention                               | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 19. Instruction in psychiatry   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 20. Instruction in neurology  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 21. Instruction in genetics   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 22. Instruction in economics  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 23. Instruction in legal liability problems in athletics                        | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 24. Instruction in philosophy   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 25. Instruction in psychology   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 26. Instruction in sociology  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 27. Instruction in dietetics  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 28. Instruction in hygiene  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 29. Instruction in an athletic training course                                  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 30. Instruction in role and duties of the athletic trainer                      | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 31. Instruction in taping and bandaging   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 32. Instruction in physical therapy (massage, hydrotherapy, and electrotherapy) | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 33. Instruction in rehabilitation   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 34. Instruction in specialized therapeutics                                     | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 35. Instruction in budget and record keeping in athletics                       | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 36. Instruction in conditioning of athletes                                     | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 37. Instruction in body mechanics   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 38. Instruction in kinesiology  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 39. Instruction in research in sports medicine                                  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 40. Instruction in athletics for girls and women                                | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 41. Instruction in tests and measurements in physical education                 | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 42. Instruction in techniques of coaching                                       | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 43. Instruction in athletic administration                                      | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 44. Instruction in health administration  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 45. Instruction in physics  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 46. Instruction in chemistry  | 4 | 3 | 2 | 1 |

|   |   |   |     |   |   |   |   |   |
|---|---|---|-----|---|---|---|---|---|
| 1 | 2 | 3 | 47. | Instruction about health center services  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 48. | Service as a student trainer  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 49. | Service as a student trainer with<br>football   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 50. | Service as a student trainer with<br>basketball   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 51. | Service as a student trainer with track   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 52. | Service as a student trainer with the<br>minor sports (baseball, tennis, golf,<br>gymnastics, etc.) | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 53. | Service as a student equipment manager  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 54. | Service as a student trainer for local<br>high school teams on their game nights                    | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 55. | Experience in the rehabilitation of<br>athletic injuries  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 56. | Experience with preventative and<br>corrective taping   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 57. | Operate the athletic training modalities  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 58. | Practice massage techniques   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 59. | Travel with athletic teams  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 60. | Assist in taking the inventory  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 61. | Assist in allotting the athletic<br>training budget for equipment and<br>supplies                   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 62. | Assist with the athletic laundry  | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 63. | Attend athletic training clinics and<br>conventions   | 4 | 3 | 2 | 1 |
| 1 | 2 | 3 | 64. | Participate in varsity athletics  | 4 | 3 | 2 | 1 |

THE ROLE OF COLLEGE AND UNIVERSITY  
ATHLETIC TRAINERS IN TEXAS  
AND BORDERING STATES

VALIDITY STUDY

Additional Item Inventory

After reading and responding to the validity of the items on the enclosed questionnaire, The Role of College and University Athletic Trainers in Texas and Bordering States, I find it complete with the following additions and/or corrections:

Additional comments:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



APPENDIX E

THE FINAL QUESTIONNAIRE

THE ROLE OF THE COLLEGE AND  
UNIVERSITY ATHLETIC TRAINER IN  
TEXAS AND BORDERING STATES

Part One

The Role

As an athletic trainer in Texas or bordering states you are asked to respond to Part One by circling the appropriate alternative in regard to your role as athletic trainer.

Yes This item is one of my roles as a college or university athletic trainer.

No This item is not one of my roles as a college or university athletic trainer.

As an athletic director in Texas or bordering states or a national athletic training specialist you are asked to respond to Part One by circling the appropriate alternative in regard to your perception of the role of the athletic trainer.

Yes This item ought to be a role of the college and university athletic trainer.

No This item ought not to be a role of the college and university athletic trainer.

- 
- |  |     |    |
|--|-----|----|
| 1. Directly responsible to the athletic director                         | yes | no |
| 2. Directly responsible to the school physician                          | yes | no |
| 3. Directly responsible to the head coach of each sport                  | yes | no |
| 4. Directly responsible to the head of the physical education department | yes | no |
| 5. A full-time athletic trainer with no teaching or coaching duties      | yes | no |
| 6. A full-time athletic trainer with teaching duties                     | yes | no |

|     |  |     |    |
|-----|--|-----|----|
| 7.  | A full-time athletic trainer with coaching duties  | yes | no |
| 8.  | A full-time athletic trainer with teaching and coaching duties                                   | yes | no |
| 9.  | Teach in the spring semester   | yes | no |
| 10. | Teach in the fall semester   | yes | no |
| 11. | Teach in the summer session  | yes | no |
| 12. | Teach a course in the care and prevention of athletic injuries                                   | yes | no |
| 13. | Teach a course in first aid  | yes | no |
| 14. | Teach a course in kinesiology  | yes | no |
| 15. | Teach a course in health and safety  | yes | no |
| 16. | Teach a course in physiology of exercise   | yes | no |
| 17. | Teach a course in therapeutic techniques   | yes | no |
| 18. | Teach a course in required physical education activities   | yes | no |
| 19. | Coach in the fall semester   | yes | no |
| 20. | Coach in the spring semester   | yes | no |
| 21. | Coach in the summer session  | yes | no |
| 22. | Coach basketball   | yes | no |
| 23. | Coach football   | yes | no |
| 24. | Coach baseball   | yes | no |
| 25. | Coach cross country  | yes | no |
| 26. | Coach track  | yes | no |
| 27. | Coach golf   | yes | no |
| 28. | Coach gymnastics   | yes | no |
| 29. | Coach soccer   | yes | no |
| 30. | Coach swimming   | yes | no |
| 31. | Coach tennis   | yes | no |
| 32. | Other sports (specify) _____   | yes | no |
| 33. | Supervisory duties for some full-time employees  | yes | no |
| 34. | Supervisory duties for some part-time employees  | yes | no |
| 35. | Hire assistant athletic trainers   | yes | no |
| 36. | Supervisory duties of student help   | yes | no |
| 37. | Supervise and train student trainers   | yes | no |
| 38. | Appoint student trainers   | yes | no |
| 39. | Hire student trainers  | yes | no |
| 40. | Hold student trainer clinics   | yes | no |
| 41. | Offer assistance in planning the physical education curriculum                                   | yes | no |
| 42. | Maintain an annual budget  | yes | no |
| 43. | Request that a budget be allotted for the care and prevention of athletic injuries at the school | yes | no |
| 44. | Responsible for budget expenditures for supplies   | yes | no |
| 45. | Responsible for budget expenditures for medical treatments                                       | yes | no |
| 46. | Order and check athletic training equipment and supplies   | yes | no |

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|-----|--|-----|----|
| 47. | Obtain approval of the team physician of any athletic training equipment and supplies purchased  | yes | no |
| 48. | Maintain a standing and running inventory of the athletic training equipment and supplies  | yes | no |
| 49. | Maintain records of athletic equipment and supplies  | yes | no |
| 50. | Issue the athletes' equipment such as shoulder pads, shoes, laundry, etc.  | yes | no |
| 51. | Require all athletes to be fully dressed in a complete regulation uniform  | yes | no |
| 52. | Require each player wear any special equipment which has been prepared for him   | yes | no |
| 53. | Supervise a weekly check of each player's equipment to check on its working condition  | yes | no |
| 54. | Supervise a check for broken or faulty permanent equipment such as dummies, sleds, basketball goals, etc.  | yes | no |
| 55. | Repair athletic equipment such as shoulder pads, helmets, gloves, etc.   | yes | no |
| 56. | Build safety equipment and injury protection pads  | yes | no |
| 57. | Advise coaches and the team physician in the selecting of protective equipment for purchase and use in the athletic department   | yes | no |
| 58. | Keep the athletic training quarters in an orderly and sanitary state   | yes | no |
| 59. | Clean the athletic training room daily   | yes | no |
| 60. | Advise proper authorities regarding the ready availability of the training rooms to enable them to have access to dressing rooms, entrances, athletic equipment, toilet facilities, and shower rooms | yes | no |
| 61. | Advise proper authorities that the training room should supply adequate and proper illumination and lighting   | yes | no |
| 62. | Advise proper authorities that the training room should provide adequate ventilation   | yes | no |
| 63. | Advise proper authorities that the size of the training room should be adequate  | yes | no |
| 64. | Keep the equipment within the training room in proper working condition  | yes | no |
| 65. | Provide storage areas for the athletic training supplies   | yes | no |
| 66. | Provide a training room designed as a multi-purpose room   | yes | no |
| 67. | Provide late papers, magazines, and periodicals in the athletic training room for athletes to read   | yes | no |
| 68. | Provide a place for players to study in the athletic training room   | yes | no |

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|-----|--|-----|----|
| 69. | Provide cots or beds in the athletic training room for the athlete who wants to stretch out for a rest                                       | yes | no |
| 70. | Keep first aid kits up to date and available   | yes | no |
| 71. | Wear a white uniform in the athletic training room   | yes | no |
| 72. | Wear a white uniform on the game field   | yes | no |
| 73. | Have the authority to discuss the injuries situation of the team with newswriters and commentators   | yes | no |
| 74. | Member of the National Athletic Trainers Association   | yes | no |
| 75. | Member of the American Physical Therapy Association  | yes | no |
| 76. | Member of the American Registry of Physical Therapists   | yes | no |
| 77. | Member of the American Association for Health, Physical Education, and Recreation  | yes | no |
| 78. | Member of the American College of Sports Medicine  | yes | no |
| 79. | Further formal education   | yes | no |
| 80. | Know escape mechanisms used by an injured athlete  | yes | no |
| 81. | Help the athlete to face his problems whether they be psychological or emotional   | yes | no |
| 82. | Help the athlete to act in a constructive manner in overcoming his problems  | yes | no |
| 83. | Be realistic in considering the aches and pains of the athletes  | yes | no |
| 84. | Have a genuine interest in the team and its individuals  | yes | no |
| 85. | On request, counsel coaches and/or players regarding conditioning, staleness, exercise, nutrition, protective equipment, and similar matters | yes | no |
| 86. | Provide ego-support for the athletes   | yes | no |
| 87. | Help develop motivation in the athletes  | yes | no |
| 88. | Promote interest in the athletic training program to the school, team, and the community   | yes | no |
| 89. | Assume physical therapy duties for schools and communities in time of emergency  | yes | no |
| 90. | Advise proper authorities to request attendance of the team physician at football contests   | yes | no |
| 91. | Advise proper authorities to request attendance of the team physician at basketball contests   | yes | no |
| 92. | Advise proper authorities to request attendance of the team physician at minor sports contests   | yes | no |

- |      |  |     |    |
|------|--|-----|----|
| 93.  | Advise proper authorities to request the team physician to be subject to call during practice hours                    | yes | no |
| 94.  | Jointly responsible, with the team physician, the coach, and the administration, for the handling of athletic injuries | yes | no |
| 95.  | Have a standard procedure for handling athletic injuries   | yes | no |
| 96.  | Accept the responsibility of handling injuries which do not require the services of a team physician                   | yes | no |
| 97.  | Have full responsibility for handling injuries occurring during practice sessions of contact sports                    | yes | no |
| 98.  | Have full responsibility for handling injuries occurring during scrimmages in contact sports                           | yes | no |
| 99.  | Have full responsibility for handling injuries occurring during games of contact sports                                | yes | no |
| 100. | Assume sole responsibility for the medical care of the athletes  | yes | no |
| 101. | Provide first aid for injuries to athletes   | yes | no |
| 102. | Transport athletes to the doctor in a private care if injured during practice  | yes | no |
| 103. | Be allowed by the team physician to diagnose minor injuries  | yes | no |
| 104. | Be allowed by the team physician to diagnose major injuries  | yes | no |
| 105. | Prescribe treatment following diagnosis  | yes | no |
| 106. | Provide follow-up treatment to athletic injuries   | yes | no |
| 107. | Examine all injured athletes before they leave the dressing room   | yes | no |
| 108. | Be alert for injuries on the playing area at all times   | yes | no |
| 109. | Request access to the health services of the school during practices and games   | yes | no |
| 110. | Regularly give first aid treatment for injuries incurred in physical education or intramural activities                | yes | no |
| 111. | Regularly give rehabilitative treatment to students incurring injuries in a physical education or intramural activity  | yes | no |
| 112. | Provide medical attention for spectators   | yes | no |
| 113. | Arrange for the dietary supplements for athletes if necessary  | yes | no |
| 114. | Responsible for the menu of the pre-game meal  | yes | no |
| 115. | Responsible for supervision of the athletes' sleeping habits   | yes | no |
| 116. | Dispense prescription medicine   | yes | no |
| 117. | Dispense medication to be taken orally   | yes | no |
| 118. | Give injections  | yes | no |

- |      |  |     |    |
|------|--|-----|----|
| 119. | Apply sutures for minor injuries if needed   | yes | no |
| 120. | Responsible for having, at contact sports, an ambulance on immediate call for all games  | yes | no |
| 121. | Instruct all athletes to report all injuries   | yes | no |
| 122. | Give careful training and instruction to athletes to help prevent accidents  | yes | no |
| 123. | Stress prevention of injuries  | yes | no |
| 124. | Provide preventive taping and wrapping for the athletes  | yes | no |
| 125. | Suggest to the coach that fatigued athletes be substituted for   | yes | no |
| 126. | Organize and be responsible for the out-of-season conditioning program of the athletes   | yes | no |
| 127. | Organize and be responsible for the weight training program of the athletes  | yes | no |
| 128. | Supervise the warm-up of athletic teams before practice  | yes | no |
| 129. | Provide assistance to the coaches in organizing practice schedules   | yes | no |
| 130. | Send letters to each athlete during the summer months encouraging conditioning prior to September  | yes | no |
| 131. | Responsible for knowing the health and medical history of the athletes   | yes | no |
| 132. | Obtain from each athlete a permit, signed by the parents, before the boy can participate in the athletic program                             | yes | no |
| 133. | Appoint a team physician   | yes | no |
| 134. | Keep records of the injuries to athletes   | yes | no |
| 135. | Maintain up-to-date health records   | yes | no |
| 136. | Maintain a case history of the athlete of all injuries received prior to attending your school   | yes | no |
| 137. | Maintain a case history of the athletes' injuries while attending your school  | yes | no |
| 138. | Fill out a standard accident report with pertinent information regarding any injury  | yes | no |
| 139. | Responsible for notification of the parents at the time of an athlete's injury   | yes | no |
| 140. | Supervise the issuing of teeth protectors  | yes | no |
| 141. | Have knowledge of medical and dental insurance   | yes | no |
| 142. | Have possession of the insurance records   | yes | no |
| 143. | Handle the insurance policies  | yes | no |
| 144. | Advise proper authorities that each athlete should be properly protected by medical insurance  | yes | no |
| 145. | Allow the team physician sole authority for determining the physical fitness of an athlete who wished to participate in the athletic program | yes | no |

|      |   |     |    |
|------|---|-----|----|
| 146. | Obtain the team physician's approval of each athlete before he participates in <u>each</u> sport                              | yes | no |
| 147. | Prohibit all forms of "horseplay" or other activities which might result in injury  | yes | no |
| 148. | Eliminate all possible hazards by surveying dressing rooms, shower rooms, and playing areas                                   | yes | no |
| 149. | Responsible for having the gymnasium cleaned  | yes | no |
| 150. | Responsible for the care of the athletic field  | yes | no |
| 151. | Maintain and utilize daily weight charts for all athletes   | yes | no |
| 152. | Responsible for the rehabilitation of injuries to athletes  | yes | no |
| 153. | Use the techniques of corrective and physical therapy under the direction of the team physician                               | yes | no |
| 154. | Responsible for the post-operative care of the athletes   | yes | no |
| 155. | Responsible for making the final decision as to when an athlete should return to competition following a major injury         | yes | no |
| 156. | Responsible for making the final decision as to when an athlete should return to competition following a minor injury         | yes | no |
| 157. | Provide the half-time refreshments for the team   | yes | no |
| 158. | Provide the half-time refreshments for visiting team  | yes | no |
| 159. | Provide an athletic training area for visiting team   | yes | no |
| 160. | Provide medical care for visiting team  | yes | no |
| 161. | Provide a student trainer for visiting team   | yes | no |
| 162. | Provide an athletic trainer for teams leaving the campus  | yes | no |
| 163. | Supervise the athletic team throughout an entire trip, except for the pre-game instructions and the direction during the game | yes | no |
| 164. | Accompany football teams on all trips   | yes | no |
| 165. | Accompany basketball teams on all trips   | yes | no |
| 166. | Accompany track teams on all trips  | yes | no |

### Part Two

#### Professional Preparation

As an athletic trainer in Texas or bordering states you are asked to respond to Part Two by circling the appropriate number of the rating scale in regard to your undergraduate professional preparation experiences.

- |   |                 |  |
|---|-----------------|--|
| 4 | Much Emphasis   | (Type of degree held, extensive instruction in this area, broad experience in this area)                             |
| 3 | Some Emphasis   | (Adequate coverage but with a minimum of emphasis, ample competencies obtained, a minimum of experience)             |
| 2 | Little Emphasis | (Area considered but brief coverage, covered to some degree, little experience provided)                             |
| 1 | No Emphasis     | (Degree not required or was omitted, not exposed to instruction in this area, no experience provided, area excluded) |

As an athletic director in Texas or bordering states or national athletic training specialist you are asked to respond to Part Two by circling the appropriate number on the rating scale in regard to your perception of the undergraduate professional preparation of an athletic trainer.

- |   |                 |  |
|---|-----------------|--|
| 4 | Much Emphasis   | (Type of degree necessary, extensive instruction, highly desirable experience or service, broad experiences)         |
| 3 | Some Emphasis   | (Ought to be adequately exposed to coverage, ample competencies necessary, a minimum of experience needed)           |
| 2 | Little Emphasis | (Ought to be considered but not essential, brief coverage, little experience necessary in this area, can be omitted) |
| 1 | No Emphasis     | (Degree unnecessary or unimportant, ought to be omitted, no exposure to this area necessary, no experience needed)   |

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|    |                                      |         |
|----|--------------------------------------|---------|
| 1. | Bachelors Degree                     | 4 3 2 1 |
| 2. | Corrective Therapy Degree            | 4 3 2 1 |
| 3. | Pre-medical Degree                   | 4 3 2 1 |
| 4. | Registered Physical Therapist Degree | 4 3 2 1 |
| 5. | Certified Physical Therapist Degree  | 4 3 2 1 |
| 6. | Major in Athletic Training           | 4 3 2 1 |
| 7. | Major in Physical Education          | 4 3 2 1 |
| 8. | Major in Health                      | 4 3 2 1 |
| 9. | Major in Biology                     | 4 3 2 1 |



|     |   |   |   |   |   |
|-----|---|---|---|---|---|
| 10. | Student teaching as an athletic trainer                                     | 4 | 3 | 2 | 1 |
| 11. | Instruction in the Red Cross Standard First Aid Course                      | 4 | 3 | 2 | 1 |
| 12. | Instruction in the Red Cross Advanced First Aid Course                      | 4 | 3 | 2 | 1 |
| 13. | Instruction in the Red Cross Instructors Course                             | 4 | 3 | 2 | 1 |
| 14. | Instruction in human growth and development and its implications            | 4 | 3 | 2 | 1 |
| 15. | Instruction in human anatomy  | 4 | 3 | 2 | 1 |
| 16. | Instruction in human physiology   | 4 | 3 | 2 | 1 |
| 17. | Instruction in personal and community health                                | 4 | 3 | 2 | 1 |
| 18. | Instruction in safety and accident prevention                               | 4 | 3 | 2 | 1 |
| 19. | Instruction in psychiatry   | 4 | 3 | 2 | 1 |
| 20. | Instruction in neurology  | 4 | 3 | 2 | 1 |
| 21. | Instruction in genetics   | 4 | 3 | 2 | 1 |
| 22. | Instruction in economics  | 4 | 3 | 2 | 1 |
| 23. | Instruction in legal liability problems in athletics                        | 4 | 3 | 2 | 1 |
| 24. | Instruction in philosophy   | 4 | 3 | 2 | 1 |
| 25. | Instruction in psychology   | 4 | 3 | 2 | 1 |
| 26. | Instruction in sociology  | 4 | 3 | 2 | 1 |
| 27. | Instruction in dietetics  | 4 | 3 | 2 | 1 |
| 28. | Instruction in hygiene  | 4 | 3 | 2 | 1 |
| 29. | Instruction in an athletic training course                                  | 4 | 3 | 2 | 1 |
| 30. | Instruction in role and duties of the athletic trainer                      | 4 | 3 | 2 | 1 |
| 31. | Instruction in taping and bandaging   | 4 | 3 | 2 | 1 |
| 32. | Instruction in physical therapy (Massage, hydrotherapy, and electrotherapy) | 4 | 3 | 2 | 1 |
| 33. | Instruction in rehabilitation   | 4 | 3 | 2 | 1 |
| 34. | Instruction in specialized therapeutics                                     | 4 | 3 | 2 | 1 |
| 35. | Instruction in budget and record keeping in athletics                       | 4 | 3 | 2 | 1 |
| 36. | Instruction in conditioning of athletes                                     | 4 | 3 | 2 | 1 |
| 37. | Instruction in body mechanics   | 4 | 3 | 2 | 1 |
| 38. | Instruction in kinesiology  | 4 | 3 | 2 | 1 |
| 39. | Instruction in research in sports medicine                                  | 4 | 3 | 2 | 1 |
| 40. | Instruction in athletics for girls and women                                | 4 | 3 | 2 | 1 |
| 41. | Instruction in tests and measurements in physical education                 | 4 | 3 | 2 | 1 |
| 42. | Instruction in techniques of coaching                                       | 4 | 3 | 2 | 1 |
| 43. | Instruction in athletic administration                                      | 4 | 3 | 2 | 1 |
| 44. | Instruction in health administration  | 4 | 3 | 2 | 1 |
| 45. | Instruction in physics  | 4 | 3 | 2 | 1 |
| 46. | Instruction in chemistry  | 4 | 3 | 2 | 1 |
| 47. | Instruction about health center services                                    | 4 | 3 | 2 | 1 |
| 48. | Service as a student trainer  | 4 | 3 | 2 | 1 |
| 49. | Service as a student trainer with football                                  | 4 | 3 | 2 | 1 |
| 50. | Service as a student trainer with basketball                                | 4 | 3 | 2 | 1 |
| 51. | Service as a student trainer with track                                     | 4 | 3 | 2 | 1 |

|     |   |   |   |   |   |
|-----|---|---|---|---|---|
| 52. | Service as a student trainer with the minor sports (baseball, tennis, golf, gymnastics, etc.) | 4 | 3 | 2 | 1 |
| 53. | Service as a student equipment manager  | 4 | 3 | 2 | 1 |
| 54. | Service as a student trainer for local high school teams on their game nights                 | 4 | 3 | 2 | 1 |
| 55. | Experience in the rehabilitation of athletic injuries   | 4 | 3 | 2 | 1 |
| 56. | Experience with preventative and corrective taping  | 4 | 3 | 2 | 1 |
| 57. | Operate the athletic training modalities  | 4 | 2 | 2 | 1 |
| 58. | Practice massage techniques   | 4 | 3 | 2 | 1 |
| 59. | Travel with athletic teams  | 4 | 3 | 2 | 1 |
| 60. | Assist in taking the inventory  | 4 | 3 | 2 | 1 |
| 61. | Assist in allotting the athletic training budget for equipment and supplies                   | 4 | 3 | 2 | 1 |
| 62. | Assist with the athletic laundry  | 4 | 3 | 2 | 1 |
| 63. | Attend athletic training clinics and conventions  | 4 | 3 | 2 | 1 |
| 64. | Participate in varsity athletics  | 4 | 3 | 2 | 1 |

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