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Current trends in athletic training education and certification in Japan

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Current trends in athletic training education and certification in Japan

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In partial fulfillment of the requirements for
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by
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ABSTRACT

“Current trend in athletic training education and certification in Japan”

By Yuriko Ohashi

Athletic trainer is a well-established profession in the U.S., but its definition is unclear in Japan because of no certification until recently. Japan Amateur Sports Association (JASA) has started in curriculum to prepare, educate and certify athletic trainers since 1994. This study researched the current trends in athletic training education and certification in Japan. It defines the historical and present athletic training situation, and clarifies education and certification with questionnaires. Questionnaires were sent to 43 sports medicine professors at JASA athletic trainer accredited and non-accredited program schools, and 26 (61%) responses were returned. The current problems include lack of clinical settings. JASA athletic trainer certification has had much attention to organize several certifications. It cannot guarantee a profession as an athletic trainer due to lack of recognition of athletic trainers and it is not considered a medical profession. This certification should become more standardized in the Japanese sports medicine field.

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Current trends in athletic training education and certification in Japan

Chapter I

Introduction

Playing sports has always been one of the most popular past-times in Japan. Unfortunately, sports participation is commonly associated with injury. One of the most important professionals to oversee health conditions of athletes is an athletic trainer. Although athletic training is the well-established profession in the United States, the definition is unclear in Japan because there has been no certification for athletic trainers until recently. In addition, there are different types of certified people who use oriental medicine in a sports setting. They are also described as a “trainer”. Therefore, there is not any common standard certification like the National Athletic Trainers’ Association (NATA) in Japan, but education programs have been initiated to prepare, educate and certify individuals as athletic trainers.

Purpose

Because of the lack of the athletic training education and certification in Japan, people have called themselves trainers even though they possess different types of certifications, such as acupuncturist, massage therapist, shiatsu therapist, Judo therapist, bachelor in physical education, physical therapist (PT), athletic trainer certified (ATC), master in physical education, and others (Sports medicine quarterly, 1995). It is necessary to go to a vocational school, college, or graduate college to obtain these certifications. In addition to these, there is a new certification from the Japan Amateur Sports Association (JASA) that is called an “athletic trainer.”

In 1994, JASA started to organize education and certification programs for athletic

trainers. The NATA originated in the United States in 1950 and has developed into a large and well respected allied health care organization. There are several differences between American and Japanese education and certification routes for athletic trainers. There are some studies about athletic training education and certification in Japan, but they do not discuss the demand for athletic trainers. As an individual who has been studying athletic training in the U.S., it will be interesting to study the current trends in athletic training education and routes to certification. It will also be good to discuss the future of athletic training in Japan.

The purpose of this study was to examine the past, present, and future of athletic training in Japan. It describes the present status and future demand with a questionnaire for professors who teach athletic training or related subjects, such as sports medicine or athletic rehabilitation. Moreover, it considers developing the athletic training programs and certification by comparison with other countries organizations. It would be interesting to know the history and future of athletic training education and certifications, and hopefully to help with the development of athletic training in Japan.

Significance

Athletic trainers are not well-established professionals in Japan. In general there are a few full-time athletic trainers in college, and there are no full-time athletic trainers at high school. Most of the college teams have student trainers or managers, who do not have any formal education and certification in athletic training, and they also manage the team, including travel, budget, and equipment maintenance. In addition they need to participate in meetings, such as college sports associations and student organizations. This could decrease their availability to adequately take care of their athletes. Some active student trainers study athletic training individually or voluntarily attend seminars on athletic training. A few teams have both student trainers and managers to better provide

responsibility for each work area. College sports are not established as a business as much as in the United States, so they do not have enough the funds to hire a full time or even a half time athletic trainer. There are very few education programs of athletic training at the college sports setting due to lack of faculty in athletic training.

In some case, sponsors of industrial and commercial teams decrease or stop their support because of the business depression, and sometimes these teams have to terminate the activity. It has been reported that several teams were dissolved due to lack of support from 1995 to 1999 (MECSST, 2002). As a result, the athletic trainers do not have a chance to obtain a job with these teams, and it gets to be more and more competitive. As it is difficult to find a full-time athletic trainer position for college and industrial and commercial teams, athletic trainers have to fill multiple roles such as athletic trainer, teacher, and/or strength conditioning coach. In addition, some athletic trainers work for some teams as a “volunteer”, even though they have earned appropriate credentials. The Japanese athletic training profession is not as advanced as in American.

On the other hand, professional teams have some positions for full-time athletic trainers. Although Japan does not have many professional teams as in the U.S., there are two major professional sports, baseball and soccer. They primarily hire “trainers” who have a certification as a Judo therapist, massage therapist, or acupuncturist. It is common to call a massage therapist a “trainer” in Japan because traditional therapy has helped athletes to be comfortable to play sports especially if they need relief of their pain. This is a competitive profession due to small budgets and various other specialists serving as an athletic trainer. However, it is essential to have athletic trainers in sports settings because these individuals know the most appropriate methods of injury prevention, emergency care, as well as athletic rehabilitation. All individuals working with sports need to know the importance of having an athletic trainer available at all sports settings.

This study investigated the following three areas pertinent to Japanese athletic training: 1) the history and background of athletic trainers at various sports setting; 2) the situation of athletic training education and certification systems related to athletic training; 3) the demand on athletic training education to produce qualified athletic trainer.

Thesis Statement

This study researched the current trends in athletic training education and certification in Japan. It helped explain the history, the present athletic training situation and clarify the present and the future of athletic training education and certification. This was accomplished with a written questionnaire of professors in the area of athletic training in Japan.

Definitions

Medical Certification

Physical therapist

Japanese federal government started to make the certification of physical therapist (PT) in 1965. Before 1965, traditional therapists such as acupuncturist, massage therapist, and Judo therapist took responsibility of rehabilitation. PT's can work at the clinic or hospital to help rehabilitation and treatment of patients. However, they do not open private clinics because they have to work under the direction of a physician. Japanese PT student may take the certification examination when they complete the three years' vocational school or college instead of the four years of college required to be eligible to take the exam as in the U.S.

Acupuncturist

Acupuncturist is one of the traditional therapists originating from China.

Acupuncture has several thousands of years of history in China but the Japanese history is from 701, AD. It is an oriental medical therapy involving the

manipulation of small needles into specific body points (called meridians) in order to relieve pain, treat disease and improve general health. Acupuncturist can open their own clinic, but patients cannot use their health insurance for the treatment. They go to three years' vocational school to be eligible for the certification examination.

Judo therapist

Judo therapists are also one of the traditional therapists and legally certified expert in first aid for fracture, dislocation, sprain, and contusion. The history of Judo therapy is retroactive to 8th century. They can open clinics and use electrotherapy as a treatment, and patients can use their health insurance for payment. It is less costly for patients to obtain the treatment from a judo therapist; the equivalent of a three – four dollar co pay in the U.S. since insurance pays for part of the treatment. They must complete three years' vocational school to be eligible for the certification examination. It has become difficult to enter this type of school because many individuals are entering the field. Once they become certified and open a clinic, they will be able to receive stable payment from patients' health insurance.

Massage therapist

Massage therapist specialize in massage using a variety of techniques and for a variety of purposes. This includes shiatsu therapist, who is a Japanese massage technician who utilizes techniques such as finger pressure and meridian stretches. An Acupuncturist can also apply massage therapy as permitted by law. They attend two or three year vocational school to prepare for the certification examination. It is rare to open a clinic with only a massage therapist certification. People usually have several certifications, such as Judo therapist or acupuncturist before opening a clinic. Patients cannot use their health insurance for the massage treatment.

Sports setting

Professional team

Japanese professional sports include baseball and soccer leagues, and golf, tennis, ski and sumo wrestling. Some of the athletes have professional status including volleyball, basketball, and rugby. Generally, the money generated by professional athletes is not as large as in the U.S. The Japanese soccer league is called the J-league beginning in 1991 and was popular. However, popularity did not last and while the J-league has tried to gain popularity including world cup game participation. Not many audience or fun, which was not used to be, make a bad cycle for J-league systems because they cannot make money if they do not audience or fun. All professional sports are struggling due to the business depression. They usually have a full-time athletic trainer on medical staff

Industrial and Commercial team

Industrial and Commercial team includes basketball, volleyball, rugby, football, baseball, softball, handball, track& field, and ice hockey. Companies will invest in a sports team as a form of advertisement. The company expects the benefit of television broadcasting to enhance the popularity of the company's name. Athletes are expected to do office work as employees whenever they have a day-off or during the off-season. In addition, they might have to work in the morning and go to the practice in the afternoon. When an athlete retires many will stay and still work as employees. While there are full-time athletic trainers with larger teams, it is more common to hire part-time athletic trainers.

College team

There are sports teams at Japanese colleges. Unlike the U.S., there are few scholarships for the athletes. Budgets to hire the coaches and sports medicine staff in Japan are very limited. Many teams have a volunteer coach and medical staff which could include students. Student trainers may be part of a team as a

volunteer which means that they must learn on their own. Because of limited budgets, athletes have to buy their own equipment and uniforms. If they have to travel to an away game, they would have to pay for transportation and meals. While larger schools provide some monetary support for their teams they certainly cannot compare with the U.S. college sports programs. There are very few full-time athletic trainers at larger colleges and it is uncommon to even hire part-time athletic trainers.

High school team

There are high school teams at each high school. Teachers usually coach the teams and a school nurse takes care of the athlete's injury. However, school nurses rarely are at the school when athletes practice, because it is in the evening after normal school hours. There are a few full-time or part-time coaches and medical staff for some private high schools, but rarely in the public high school. There is almost no budget from the school to support their sports teams.

Little league

Japanese little league is very similar to the U.S. program. Children's teams include baseball, soccer, and basketball. Coaches and medical staff are typically parents or volunteers. Some of the larger teams have a more organized and formal system for staffing, but it is rare to have an athletic trainer at games. Should a participant sustain an injury, they would go to a local hospital or clinic for appropriate treatment.

Chapter II

Review of the literature

Japanese people have an interest in sports as well as health and fitness including playing or watching sports. The Japan Amateur Sports Association (JASA) is an organization of amateur sports which promotes participation as well as correct and safe techniques. It was founded in 1911 to promote sport and fitness activity and also assisted with the Tokyo Olympic Games in 1964. As the popularity of sports has increased, the JASA now encourages sports leaders, promotion of lifetime activities, international sport competition as well as supports research in the areas of sports medicine and sports science (JASA, 2002).

In Japan, the “athletic trainer” is not well known as one of the sports leaders because the coach or doctor has typically performed these responsibilities. As previously mentioned, the traditional “trainer” could also be a massage therapist or acupuncturist in Japan. These people are admitted as healthcare professionals by law and are able to treat patients. On the other hand, athletic trainers are not recognized as healthcare providers and are unable to treat patients. Becker-Doyle (1996) states “In Japan, the athletic trainer is not considered an allied health professional, but someone who is affiliated with sports.”

This literature review will detail several issues to better clarify the current state of Japanese athletic training education and certification. Included will be: 1) History of Japanese sports society and athletic training; 2) JASA athletic trainers’ education and certification; 3) National Athletic Trainers’ Association education and certification; 4) Japan Athletic Trainer Organization; 5) other athletic trainers’ associations in Japan; 6) other country’s athletic trainer certifications; and 7) current trends including three on-site visits at Japanese colleges and professional settings.

History

After World War II, sports competition has changed to being more competitive. This includes the development of a national sports meet that is hosted annually by a different city within Japan. The main purpose is to promote competition rather than just physical and mental health. These became even more competitive after the Tokyo Olympic games. However, many Japanese Olympic sports events remain as amateur sports except for baseball, soccer, tennis and golf. Amateur sports have increased from public support as well as support from a variety of businesses. The Los Angeles Olympic Games in 1984 were provided commercial support from a variety of businesses. Today, the International Olympics and the Federation International de Football Association (FIFA) World cup grant television rights based on monetary gains. The Japanese sports environment has adapted to these changes to these changes in the 21st century in both the professional and amateur sport levels. As the sports environment changes, more leaders are needed to educate and coach the athletes. One reason Japanese athletes at all levels have not developed very well and some teams have even been dropped is due to the lack of qualified sports leaders. In addition, some of the more advanced athletes have gone to other countries specialized training. (Sports Marketing Institute, 2003). However, Japanese sports' programs need qualified sports leaders and financial investments to support the development high quality athletes.

On the other hand, the Ministry of Education, Culture, Sports Science and Technology (MECSST) promotes lifetime activities. It states that sports are important to Japanese culture as it not only make us strong and healthy, but also provides feelings achievement, satisfaction and culture unity. It also helps us relieve daily stress. Enjoyment of sports can be an important factor in psychological health and total well-being. Lifetime sports produce a life worth living and are vital to society. Lifetime sports/activities

are available to enjoy anywhere anytime according to one's age and physical strength (MECSST, 2002). In addition, individuals are needed to teach lifetime activity skills and sports skills. They should demonstrate an understanding of secure safe places to play sports, modification of injury risk for children, and immediate care after injury. The JASA (2002) has developed a program to certify sports leaders under the MECSST. There are nine different certifications for sports leaders. These include: 1) Sports Instructor (level C, B, A); 2) Coach (level C, B, A); 3) Teacher of Industrial Setting (level C, B, A); 4) Sports Doctor; 5) Athletic Trainer; 6) Fitness Trainer; 7) Sports Programmer; 8) Sports Instructor for Juveniles; and 9) Examiner for Fitness Testing.

The athletic trainer listed above is different from the certified athletic trainer (ATC), and is known as a massage therapist in Japan. The first record of a sports massage therapist was in the 1920's. At the Tokyo Olympic Games in 1964, there were about 100 trainers (mostly massage therapists). In 1970's, U.S. baseball and football teams came to Japan with their ATCs who taught various athletic taping methods. Afterwards, a supply company provided supplies as well as courses in proper taping procedures. The first Japanese ATC, Shikakura, also taught those in courses. These factors brought the influence of American athletic training to the Japanese sports environment. In 1980, the first sports orthopedic center opened, and now this specialty has spread all over Japan. The first step of athletic training certification and education was initiated in 1994 by the JASA. The Japanese athletic training field has continued to change as it incorporates athletic trainers from the U.S. with traditional Japanese trainers (Kiyoi, 1998). Yamamoto (2003) states people historically considered athletic trainers' roles as rehabilitation after athletic injury or to massage the athletes for relaxation. However, he also notes that the role now includes teaching prevention of injury and conditioning of the athletes including flexibility and strength training. However, it is more important to find

out the mechanism of injury to prevent further injury or others being injured.

In summary, the Japanese sports environment has changed. Still the level of performance of the athletes in Japan appears to be declining, possible due to the lack of qualified sports leaders. The JASA has set up some sports leader's certifications. Athletic trainer is one of the sports leader's certifications having started in 1994. At the same time, athletic training education programs have been developing. This study will provide a better understanding of current trends in athletic training education and certification. This will clarify various historical and complicated certifications for athletic trainers as well as unclear education patterns for athletic training. Yamamoto (1994) states it is not too much to say that the education of student athletic trainers is needed to provide persons to manage athlete's health issues.

JASA

Japan Amateur Sports Association (JASA) is an organization of the amateur sports to encourage individuals to play sports and to promote correct and safe participation. The JASA is associated with Ministry of Education, Culture, Sports Science and Technology (MECSST) and it governs all amateur sports from youth to adult. As it has been more popular to watch and play sports, the JASA has gone on encourage of sports leader, promotion of lifetime sports, interchange of international sports, and research of sports medicine and science (JASA, 2002).

As one of the encouragements for sports leader, the JASA set up athletic trainer education and certification in 1994 based on being authorized by the MECSST. In the first year, 271 athletic trainers, who were contracted with the Japanese Olympic Committee (JOC), professional baseball or soccer teams, or industrial and commercial teams, were recommended to take three-day seminars and certification examinations. Each applicant

could receive the certification, which was similar to the NATA in 1970 (Tsuruike, 2002). In 1995, the JASA started providing courses and the certification examinations for an athletic trainer. There are two different ways to acquire the certification: 1) Take seminars and the examinations, 2) Enter an accredited program and take the examinations. Both ways require a recommendation from the JASA approval sports organization. However, only 75 applicants have been able to attend seminars since 1999 even though they have a recommendation, because the JASA would like to maintain a high quality for the JASA athletic trainer. In addition, there is no exemption for ATCs from the JASA athletic trainer certification even though they have studied athletic training in English. They still have to attend the seminars (Becker-Doyle, 1996). It is a competitive and complicated certification. It shows only 198 people obtained the JASA athletic trainer certification for the six year period of 1994-1999. There was a dramatic increase to 469 JASA athletic trainers as of October 2001 (JASA, 2002). Totals in 2002 are 550 JASA athletic trainers with 278 having attended special courses, 221 attended JASA provided seminars, and 51 graduates of accredited programs. As the educator of JASA athletic trainer, the concept of an “athletic trainer master” has been approved in 2000. There is only one accredited program which is at the graduate level for the athletic trainer master certification. There are 14 athletic trainer masters as of 2001 (Yamamoto, 2002).

It is said that to study at an accredited program of athletic training and take examinations are more difficult to get the certification than to take the seminars because of applicants’ lack of knowledge and experience. According to the Recruit (2002) there are 622 universities including 81 sports related universities. There are 585 community colleges including 31 sports related schools. In addition, there are 3565 vocational schools including 554 sports related schools. The JASA has established accredited programs at nine universities, one community college, one graduate school and 19

vocational schools. Three more universities have prepared to be accredited programs (JASA, 2002). Each school has its own unique characteristics regarding professors' backgrounds, core courses, and practical settings.

There are more colleges, which provide only general courses for JASA athletic trainer certification, but not include of core courses. These schools are generally admitted for some other sports leader certification's courses by JASA. Therefore, they cover some general courses for JASA athletic trainer certification. These schools are sports related schools, such as physical education, sports science, or lifetime sports departments. However, students, who want to get JASA athletic trainer certification, have to take core courses at the seminar individually after taken general courses. Although not many students will be JASA athletic trainer from these colleges, they are good places to educate future educators at sports field and expand athletic training.

The JASA decides students at accredited schools can take courses for the JASA athletic trainer, which is for 228 hours of general courses and 136 hours of core courses. These courses are for the following intentions about athletes' health and safety: health care, prevention, first aid, athletic rehabilitation, training and conditioning. The general courses include sports sociology, sports psychology, training science, sports medicine, sports nutrition, sports coaching, sports management of local community and research classes. On the other hand, core courses include training science, sports medicine, sports nutrition, CPR, and athletic rehabilitation classes, and taping and conditioning labs. In addition to take these courses, students are required to take three more courses to take the certification examination, which are role of athletic trainer, doping control, and safety (JASA, 2002). From accredited program's applicants, they have to pass the written examination before taking the oral examination because they do not have enough medical terminology to response the oral examinations. According to Tsuruike (2002), it is less than 10% of

candidates including retakes from accredited programs who pass the certification examination. However, 40% of candidates including retakes who complete the seminars pass the certification examination.

Furthermore, one of the problems at the accredited program of the sports related university is practical experience of athletic training. Although most schools have enough courses of general sports medicine, exercise physiology, biomechanics, sports nutrition, sports psychology, and training programs, there are not enough practical experiences with supervisors because the JASA does not require practical experience as a requirement course at the accredited athletic training program. Fujii (2002) says that students need to learn knowledge and skill, and they have to have precise practical experience as well. Yamamoto (2002) also notes JASA athletic trainer system's task is to complete practical experience for student athletic trainers at accredited college programs.

There are good facilities and administrations for talented athletes and powerful teams at sports related universities, which are the great places to gain experience as a student athletic trainer. It would be ideal to have educators or supervisors, who have already gained experiences as athletic trainer. Currently, there are seven full-time ATCs and five part-time ATCs at colleges setting (JATO, 2002). However, there are not enough supervisors to educate students. In addition, there have been traditional student trainers, who belong to a team as a member of the team, so it is difficult to change all the teams' management for the practical experience of student athletic trainers.

According to Yamamoto (1998), Japanese student athletic trainers' activity is different from American because it is not required for school programs, and it says just a volunteer activity. In addition, not every student will be able to be an athletic trainer even they go to the accredited program school because of lack of employment as athletic trainers. Incidentally, Yamamoto is the professor at one of the accredited program's universities,

International Budo University (IBU), which started the first sports trainer (athletic trainer) department in 2001 (IBU, 2002). Students were interested in athletic training education, but there were unclear education systems and did not have opportunity to gain experiences. This is one of the decent departments for athletic training both academicals and practical settings, and students will be able to be an eligible for the JASA athletic trainer certification. While this practical setting is not admitted as classes, students have higher motivation to learn at practical setting with supervisors. There is the group called “trainers’ team” to occur athletic training for the college or high school athletes as student athletic trainers. They provide a seminar for student athletic trainers from each sports team to educate about the basic athletic training skill and medical protocol annually, and approve as a student athletic trainer. They also have national student meeting annually to share their idea and develop athletic training with all over college student athletic trainers and their professors (Yamamoto, 2003). These accredited program colleges have been progressing and improving with corresponding to students and sports medicine field people.

On the contrary, most of the vocational schools are for two years, students have to learn large information for short time and get practical experiences equally. The schools need to find the places for the students because there are no school’s athletic teams for vocational schools like colleges have. It is also said unless students have a chance to go to the teams as an experience, it is just experience and they never have responsibility of team’s managements during a short period of time. In addition, successful of the certification examination’s rate from the vocational schools are worse than the accredited program universities because it is thought there is limited curriculums for the short time. One of the vocational schools’ teachers, Yamagishi (2001) explains that the certification examination of the JASA athletic trainer is not easy to obtain, but it is an official approval to be as an athletic trainer, so students have to study with concentration to success for it,

even if they do not enough experiences of athletic training.

On the other hand, access to seminars is limited. If applicants do not have any experience as an athletic trainer, they are unable to attend because they would be unable to have to have the required recommendation from a national, professional, commercial, or industrial team. In addition, there is a restricted quota of 75 per year. It is interesting to note that those with more experiences have a higher passing rate on the certification examination than the accredited programs graduates (Kiyoi, 1998).

The certification examination includes eight general courses, eight core courses, and four core oral practical examinations over a three day testing period. The written examination requires two days. The oral practical examination takes place on day three, which includes taping, stretching, and athletic rehabilitation. Kiyoi (1998) states that applicants fail the oral section more frequently than the written section. Applicants must pass all the sections within four year time period for accredited program's graduates, or within five years for others (Tsuruike, 2002).

The JASA athletic trainer is not an allied health care profession, but the JASA athletic trainer certification provides for a common scale or standard of the athletic trainer when compared to the other different professions that are called "trainer". One of the supporters of the JASA athletic training education, Kono (1998), states if athletes have an injury, they do not know who to ask or where they should go concerning their injury because there is not a specific athletic training profession. He also explains Japanese athletic trainers have not composed a single profession because of the unclear definition of athletic training. Recently however, athletic trainers will be able to become a professional based on their work and skills as provided by the JASA athletic trainer program. This will provide the general public much needed information about the athletic trainer as one of the sports leader. Since there are still traditional associations with different certifications, it is

difficult to combine all associations. The overall goal is that the JASA athletic trainer certification becomes more professionally valuable in the Japanese sports medicine field.

NATA

As the golden standard for athletic trainers, The National Athletic Trainers' Association (NATA) was started in 1950. The first athletic trainers were basically rub-down technicians during the early nineteenth century. The athletic trainer is often misunderstood being mistaken for a coach or teacher. Through the support of many persons and much effort the athletic trainer has developed into a specialist who plays a vital role in the health care, prevention and management of athletic injuries. Since 1950, the NATA has continued to develop professional standards for the athletic trainer. An athletic trainer education program was first proposed in 1959, but curriculum developments were not accomplished until 1969. In 1969, the NATA began to identify the desired educational components of professional preparation programs for athletic trainers at the college health and physical education departments (Kauth, 1984). Today, the NATA is known for its qualified allied health care providers. The NATA news (1997) explained quality of athletic training is improving at a phenomenal rate every year. As various publishers provide quality books and journals, people are better able to understand athletic training. The mission statement of the NATA is "To enhance the quality of health care for the physically active through education and research in prevention, evaluation, management, and rehabilitation of injuries." (Arnheim & Prentice, 2000)

According to the NATA survey (2003), the membership total is 28,166 including 22,389 ATCs plus a number of associate and student members. It has seen a ten-fold increase during the previous thirty years. The membership of the NATA shows male and female ratio as 54% male and 46% female. The employment settings of ATCs are various

including university and college (18%), clinic (18%), high school (18%), high school/clinic (14%), college student (10%), professional sports (3%) (NATA, 2003). The indication is that the athletic trainer is a respected profession due to the increasing membership and an increase in the nontraditional employment settings for the ATC.

Athletic training education includes six domains and twelve competencies by the National Athletic Trainers' Association Board of Certification (NATABOC) and the NATA Education Council. Six performance domains were established in 1999 for entry-level athletic training education programs by the NATABOC: (1) prevention of athletic training, (2) recognition, evaluation, and assessment of injuries, (3) immediate care of injuries (4) treatment, rehabilitation, and reconditioning of athletic injuries, (5) health care administration, (6) professional development and responsibility. Twelve competencies were created in 1998 for accredited educational programs by the NATA Education Council: (1) acute care of injury and illness (2) assessment and evaluation (3) general medical conditions and disabilities (4) health care administration (5) nutritional aspects of injury and illnesses (6) pathology of illness and injuries (7) pharmacological aspects of injury and illnesses (8) professional development and responsibility (9) psychosocial intervention and referral (10) risk management and injury prevention (11) therapeutic exercise (12) therapeutic modalities.

In 1994, the Commission on Accreditation of Allied Health Education Programs (CAAHEP) approved the NATA as an allied health education program by the U.S. Department of Education. The athletic training programs included entry-level accredited undergraduate and graduate programs as well as internship programs at the undergraduate level. Now, all programs must be approved by CAAHEP. This change is a positive step in the advancement of the athletic training profession (Arnheim & Prentice, 2000). Peer & Rakich (2000) states under CAAHEP, athletic training education programs have aligned

themselves with practices commonly used in medical education. The functioning and success of athletic training education programs creates high quality athletic trainers to care for the physically active. According to the NATA education council (2003), there are four different athletic training education programs: 184 CAAHEP accredited undergraduate programs, 3 CAAHEP accredited graduate programs, 14 NATA accredited master's degree programs, and 176 candidacy undergraduate or graduate programs. The NATA accredited master's degree programs are approved by the Advanced Graduate Education Committee of the Education Council.

The NATABOC was established in 1970 to certify athletic trainers and identify for the public, quality healthcare professionals through a system of certification, adjudication, standards of practice, and continuing competency programs. There are two means including CAAHEP accredited programs and internship programs to be eligible to take the certification examination. Both sets of applicants are required to be current in First Aid and Cardiopulmonary Resuscitation. They also must provide an official transcript from a college or university of their degree. CAAHEP accredited programs require thirteen core curriculum subjects; human anatomy, human physiology, psychology, kinesiology/ biomechanics, exercise physiology, prevention of athletic injuries/ illness, evaluation of athletic injuries/ illness, first aid and emergency care, therapeutic modalities, therapeutic exercise, personal communication health, nutrition, and administration of athletic training. In addition, students must complete at least 800 clinical hours under the direct supervision of an ATC.

On the other hand, internship programs are required to complete eight core courses; health (e.g., nutrition, drug/ substance abuse, health education), human anatomy, kinesiology/ biomechanics, human physiology, physiology of exercise, basic athletic training, and advanced athletic training (therapeutic modalities or rehabilitation). They

also need 1500 clinical hours under the direct supervision of an ATC. After 2004, students must complete a CAAHEP accredited program as the NATABOC will no longer admit applicants from internship programs.

When applicants complete all requirements, they are eligible to sit for the certification examination. The certification examination consists of three sections including oral-practical, written, and written simulation. The exam takes one day and consists of the oral-practical and written are four hours and the written simulation is for two and half hours. The written section consists of 150 multiple choice questions covering the six major domains explained previously. The oral-practical requires each candidate to demonstrate a series of specific skills. The written simulation is designed to test decision-making skills and consists of eight scenarios. Each section of the examination has its own passing score. All applicants have to meet or exceed the passing point in each of the three sections. If an applicant does not pass any section(s), he or she must retake that section(s) (Grace, 1995).

Erickson & Martin (2000) state that candidates who passed all three sections of the examination on their first time was 27% in 1996, 32% in 1997, and 31% in 1998. This indicates the level of difficulty of the NATABOC examination. Candidates for the NATABOC examination have to pass three different types of testing situations unlike other allied health professions who have only a single type of examination. Gazzillo, Manning, Middlemas & Young (2001) studied differences between curriculum and internship candidates' score, grade point average, and number of clinical hours. The means of examination scores points out that curriculum candidates scored significantly higher than internship candidates on the written and practical sections of examination. The written simulation section of the examination for this study did not show significant differences. They found students with higher grade point average were more likely to pass the

NATABOC examination. They also noted no relationship between the number of clinical hours and success in the NATABOC examination even though internship candidates have more clinical hours than curriculum candidates. Comfort, Gieck, Perrin & Turocy (2000) explain that total clinical hours are not predictive of the NATABOC examination outcomes. Students should receive a more structured clinical experience, such as knowledge, skills, and abilities, as opposed to just total hours. These studies support the decision to discontinue the internship route to certification.

However, Erickson & Martin (2000) state that athletic training educators believe higher grade points do not make students more likely to pass the certificate examination. Students need to have the skills of analyzing situation that is not just from the textbooks. Furthermore, higher quality of clinical experience makes students develop more responsibility and precision. Knight (1990) says, “While the book does not teach students how to perform skills, it is a compatible supplemental text for any undergraduate athletic training program.” Denegar (1997) suggests student should obtain experience in athletic training not only for athletes but also for all populations even though primary providers of athletic training services are in colleges and universities. The growth of athletic training is including hospitals, clinics, industry, and even government, as well as in competitive sports at all levels (Max, 2000). It is necessary to include current trends of demand and gain more experience before going into the work force.

The NATA has more than fifty years’ history and evolution in the United States. Athletic training education has changed and developed thorough 50 years regarding the preparation of this sports health care professional. Various leaders’ efforts for each decade have allowed athletic training to develop into a highly respected health care discipline (Behnke & Delforge, 1999). Athletic training education programs have undergone enormous transition lately due to change from NATA to CAAHEP accreditation.

JATO

Japanese ATCs established Japanese Athletic Trainer Organization (JATO) as a non-profit organization based on cooperating with NATA in 1996. The Purpose of the JATO is the following: 1) to educate the community about the value of NATA standards and to promote athletic training profession in Japan 2) to provide continuous education opportunities for the members 3) to provide opportunities to exchange opinions among the membership about the current sports medicine environment 4) to communicate with other athletic training related organizations and professionals to promote higher standards of care for athletes. The NATA certification is required to become a regular member, while any associate member of the NATA can become an associate member of the JATO (Backer-Doyle, 1996).

The first Japanese ATC, Shikakura, obtained certification in 1977. There were about 35 ATCs in 1996, and it is estimated over 100 ATCs and more than 100 students are currently studying in the U.S. Shikakura, J. (personal communication, Feb. 14, 2003), who is the president of the JATO, explains that not every ATC is a member of the JATO, but 82 ATCs are members of the JATO in 2003. According to the JATO's database, eight ATCs reside in the U.S. to work for a college or clinic and 74 ATCs are in Japan in various professions. The specific professional setting of ATCs is following; professional baseball 4, professional soccer 5, basketball 3 (men's 2, women's 1), football 7 (Some team has 2 ATCs), ice hockey 1, ski 1, softball 2 (industrial and commercial team), women's volleyball 5 (National team 1, Industrial and commercial team 4), rugby: 7 (industrial and commercial team 5, college team 2(Some have 2 ATCs); College: 6 (Teacher 3, Full time trainer 3), high school 2, vocational school 4, National Athletic Meet staff 1, clinic 7, company 4 (Athletic trainers' supplies imported or selling company), students 7, others 8. It seems there are various settings to work as an athletic trainer in Japan. However, the most

obvious differences between American and Japanese are the income levels and the types of facilities available for the athletic trainer. Some ATCs have to teach at one or more schools and work for one or more sports teams because of small income. The majorities of sports teams desire the services of an athletic trainer, but are unable to hire one due to the lack of funds.

Although there are strong education systems and precious certification of athletic training in the U.S., ATC is not reliable certification to obtain a profession in Japan. Japanese ATCs are admitted from employees about their knowledge and skill, but they cannot perform any medical treatment such as an electrical stimulation machine and ultrasound because it is illegal to perform treatment with the modalities without a medical certification in Japan. The reason why some ATCs go to school to acquire some medical certifications after going back Japan, which are acupuncturist, physical therapist, Judo therapist, or massage therapist. However, they do not have to gain medical certification because they can leave the medical treatment to the other medical professionals, and ATCs should take responsibility of general health care, prevention of injury, emergency care, athletic rehabilitation, or reconditioning. Numakura (1998) suggests that athletic trainer takes responsibility as an athletic coordinator of environmental maintenance and medical establishment with athletes, coaches, and other medical staff. It is also important to educate athletes regarding appropriate injury care.

Some of the JATO's members hold both ATC and the JASA athletic trainers certification. Some ATCs teach at the JASA accredited vocational school or college as half time or full time teachers. Two ATCs are lecturers of the JASA athletic training seminars. The JATO supports the systems of the JASA athletic training program to educate athletes, especially younger age and coaches about athletic training and promote athletic training in Japan. As the number of Japanese ATCs' increase, the JATO should

develop to better organize athletic trainers and approach public about athletic training as an important profession.

Other Athletic Trainers' Associations in Japan

In addition to the JASA athletic trainers and ATCs, there are other people who have organized additional athletic trainers' associations in Japan. They include the Japan Trainer Association (JTA), Japan Professional Baseball Athletic Trainers Society (JPBATS), Japan Baseball Athletic Trainers Society (JBATS), Japan Athletic Trainers Association for Certification (JATAC), and Japan Athletic Trainers' Association (JATA). In addition, there are local systems of acupuncturists and other sports medicine associations for some major sports.

In Japanese sports society, it is said there have been tight relationship between baseball and trainers. Majority of Japanese trainers are massage therapists originally from baseball. There are various trainers' associations at the baseball environments. The initial baseball trainers are from Komori sports massage clinic. The professional baseball teams started to employ trainers from Komori in 1950. Afterward, it is called Japan Trainer Association (JTA) and changed to be one of the main associations at baseball society. The members of the JTA are employees at the Komori sports massage clinic, which are about 100 people.

Before World War II, trainers learned taping from ATCs at international exchange baseball games. They used tape for initial treatments to prevent swelling from a contusion because they did not have ice machine or refrigerator at the stadiums on that occasion. As a traditional treatment, they did not use ice after practices or games. They have changed to use ice lately, but they still apply massage skill to cool the body. Komori sports massage clinic shows traditional treatments as a trainer in Japan. They provide the best

treatment to the athletes by mixed with Japanese and American ways.

Traditional trainer association for baseball has more than a sixty year history. Japan Professional Baseball Athletic Trainers Society (JPBATS) was established for professional baseball athletic trainers in 1940's. The American equivalent is the Professional Baseball Athletic Trainers Society (PBATS) established in 1995. The JPBATS has tried to send trainers to the National Baseball League teams' summer camps in the U.S. or have seminars presented by invited American ATCs to Japan. There are 78 JPBATS members from twelve different professional baseball teams. Each team has five to ten trainers because they also massage which requires more people (JPBATS, 2002). Becker-Doyle (1996) states there were only one or two ATCs with professional baseball teams in 1996. She also states that traditional trainers, such as massage therapist or acupuncturist, feel threatened by the ATC's expertise and worry about keeping their jobs. Although it is difficult to have both ATCs and traditional trainers due to each different historical background, it has changed to have more ATCs lately. It was estimated 60% of the JPBATS member have passed for the JASA athletic trainer as of 1996. The JPBATS strongly suggests the certification because it makes them better qualified and more professional (JPBATS, 2002).

In 1993, one of the Komori's employees, Kawashima, created the Japan Baseball Athletic Trainers Society (JBATS) from the Major Trainers Company. This company sends trainers to some teams and provides seminars to develop baseball athletic trainers' society. The seminar is called the baseball trainer seminar, which occurs annually to invited ATCs of Major League Baseball teams or a representative of the NATA. Eve Becker-Doyle executive director of the NATA was one of the invited people. She went to Japan in 1996 to present information about the education and preparation of the certified athletic trainer in the U.S. However, Becker-Doyle (1996) reports the JBATS has

attempted to restrict access to the PBATS through the JBATS alone without the PBATS's wish. Although president of the JBATS, Kawashima, desires organizing every field of baseball because baseball is the most popular sport and has a longer history in Japanese sports environment, there are complicated and controversial issues due to many kinds of organization at the same field.

In 1995, Judo therapist organization started Japan Athletic Trainers Association for Certification (JATAC) as a non profit organization for Judo therapists to achieve the following purpose; 1) to develop knowledge and skill of sports sciences, 2) to contribute promotion and maintain of national health, 3) to support national physical activity. When applicants complete the seminar of sports science, they are admitted as a member of the JATAC. The members were 541 in 1998 (Kiyoi, 1998). Now, it has been changed, and there are more options for the members. They may attend graduate school in physical education at a university or college or community college or they may attend vocational school with a sports related major to maintain the JASA sports leadership certifications. It is said as Judo therapists treat acute injury, such as sprain, strain, dislocation, and fracture, and they would have closely relationship with sports injury. However, the Judo therapists are one of the local medical experts, but they are not sports experts. Therefore, they set up the system to provide athletic trainers to every generational nation who enjoys sports (JATAC, 2003).

The Global sports medicine institute established the Japan Athletic Trainers' Association (JATA) from Miyake Sports Massage Company and it is now called the Global Athletic Trainer System (GATS). This system is only for employees of Global Sports. However, the Global Sports Medicine Institute produces various sites for the athletes and team to provide treatment, conditioning, and massage. There are some facilities to supply these programs for athletes and general public. It shows there is not much income from

athletes, so they treat the general public.

On the contrary, one of the major certifications in a sports setting as a trainer is the acupuncturist. The sports acupuncturist system was established in 1991 to educate and then approve individuals as a sports acupuncturist. It started in the Nagano prefecture for Nagano Olympic, and additional prefectures started systems during the 1990's. These systems educate and train acupuncturists. The purposes of these systems are for athletes and general people to maintain general health, prevent both acute and chronic injury, and help to improve athletic performance. Moreover, it states therapists are required to communicate with physicians and coaches with sports science knowledge and skill. Although these systems are local systems, they have tried to organize as a national system lately.

On the other hand, some major sports have athletic trainers' associations; for example track and field, basketball, soccer, and swimming. In addition, there are athletic trainers' associations at some local prefectures to improve and expand sports medicine, primarily having started at the larger sports events.

The Japanese Association of Athletic Federations (JAAF) is the organization for track and field, and has a longer history than any other sports organizations. It has been approved by the MECSSST, and had trainers' association for over twenty years. The JAAF established athletic trainer branch for the athletes to provide medical support systems with physicians, progress awareness, knowledge and skill of athletic trainers, and establish athletic trainers' standing. Since 1991, the JAAF has occurred trainers' seminar to spread athletic trainers' activity, standardize knowledge and skill of athletic trainers, educate and increase numbers of athletic trainers. When applicants complete the seminar for three days, they acquire a level C trainer. Depending on their practical experiences, the level C trainers can become a level B trainer, which is for national or local meets. After more

than one-year experience and depending on their experiences they raise Level A trainer, which is for international meets or camps. In 1998, there were 24 level A trainers, 69 level B trainers, and 111 level C trainers. In 1990, the trainers' association started three stations for the athletes at the national meets and the athletic competitions, such as medical, trainers' and first aids' stations. When the athletes are injured at the meet, athletes go to the medical station first, and trainers' station afterwards. It is an easier way to report their injuries. Therefore, people who need to work at the track and field event as an athletic trainer, they have to have at least a level C trainer license even they hold the JASA athletic trainer or ATC (JAAF, 2003).

The Japanese Basketball Federation (JBF) started medical science committee in 1987, and branched out a trainers' association in 1991. They have seminars to approve as a member of the JBF trainers' association for the four following purposes: 1) to prevent both acute and chronic injuries of basketball, 2) to manage athletes' health care, 3) to organize athletic trainers for basketball, 4) to contribute basketball diffusion and development with medical support. People, who work as a trainer at the JBF approval teams, can take the seminar and obtain the JBF official member of trainer. They provided seminars or meetings constantly until 1994, but they terminated the seminars due to the JASA athletic trainers' certification program. Now, trainers are required to register for the JBF, therefore the JBF can grasp situation of trainers at the basketball teams. They plan on creating a supported system for all-star teams, and organize and develop the basketball medical system.

The Japanese Football (soccer) Association (JFA) began using the term "masseur" instead of "trainer" in 1990 under the sports medical committee. At first, the JFA began a masseur section and has now changed to the J-league athletic therapist society. J-league is the Japanese professional soccer league, which has 16 teams in division I and 12 teams in

division II starting in 1991. The purpose of this society is to expand the knowledge of sports medicine and soccer, prevent athletic injury, maintain athletes' general health, and promote the exchange of trainers' idea and information. While this is only for the J-league trainers, the JFA hopes it will become available for all soccer athletes. It is thought the World Cup 2002 is an excellent opportunity to initiate the trainers' system. In fact, there was a small but inconsistent volunteer medical staff (JABBA, 2003).

The Japan Swimming Federation (JASF) established a trainer's association for swimming to promote information and better skill, and improve the quality of trainers in 1991. That was started from physician's meeting, and have trainers who are physical therapists and/or massage therapists because they are required at have at least one medical certification. It is separated into two committees (medical and scientific) to better promote the development of the Japanese swimming society. There were 41 members of the JASF trainers' association in 2000. In addition, it explains trainers for swimming needs massage skills because of sports specific movement. At Nagano Olympic, there were two physical therapists, two Judo therapists, 10-12 acupuncturists and massage therapists, among others (JASF, 2003).

On the other hand, some prefectures create trainers' associations to improve athletic trainers' knowledge and skill, educate athletes and recreational sports people about reconditioning, and create a safer sports environment. The opportunity of starting these associations include the place where national meetings, national tournaments, Asian Championship occur. They provide athletic trainers from these associations at the competitions. The association has seminars or meetings on a regular basis to improve the quality of athletic trainers, promote cooperation with other trainers, and to further develop sports society locally (Kiyoi, 1998).

Different certifications have various characteristic. There are some associations

to organize education and certification, and some of them set up specific institutes. Each sport has different mechanisms of injury and specific characteristic of injury. In the 1990's, they started organizing trainers' systems for each sport to share ideas and improve their skills. Some associations are terminated due to the JASA athletic trainer certified system, but some of them are still function. Moreover, there are some local associations of athletic trainers. They have different ideas for each certification and sport, and it is difficult to organize nationally. However, it would be possible to make the JASA athletic trainers systems as the top organization of athletic trainers, and branch out each certification, sport or prefecture trainer's associations.

Athletic trainer in other countries

In addition to the NATA, there are different certifications and associations in other countries. This study explains about Canada, England, Australia, and South Africa. Furthermore, there is the world association called World Federation of Athletic Training and Therapy (WFATT).

In Canada is the Canadian Athletic Therapists Association (CATA) which oversees education and certification. The CATA makes people special professionals as an athletic therapist certification. There are six accredited schools prepare persons to be eligible for the CATA board of certification. The certified athletic therapist (CAT) manages assessment, prevention, immediate care, and reconditioning of musculoskeletal injuries. The athletic therapist is one of the health care delivery professionals to keep athletes healthy. For the certification examination 1200 hours internship of practical experience under the supervision of CAT is required. Candidates need 70 percent of the written examination to pass. The final step is a practical examination covering emergency care, supportive taping/ bracing, modalities, injury assessment and rehabilitation. Once people

are certified as an athletic therapist, they obtain a job as the athletic therapist at various settings. (CATA, 2003).

In England, there is a new certification, Certified Sports Trainer, for physiotherapist and sports rehabilitator. The Association of Chartered Physiotherapists in Sports Medicine (ACPSM) established in 1972 for physiotherapists to specialize in the field of sports injuries. The member of ACPSM is over 1,000 at present. It requires a three-year undergraduate program to be a physiotherapist. Sport physiotherapist is a specialist of sports injury as a physiotherapist. However, there is no specific license to be sports physiotherapist. Once they have qualified physiotherapists then can attend post-graduate courses to specialize in sports injury. They gain much of their experience working at sports club level, and obtain a considerable number of years experience in sports field (ACPSM, 2003). On the other hand, British Association of Sports Rehabilitators and Trainers (BASRaT) established to represent the professionals working in the field of sports and exercise injury prevention, treatment and rehabilitation, to ensure the highest, quality-assured standard of healthcare for the physically active in the United Kingdom. The member of the BASRaT is required to attend the accredited undergraduate schools. They learn five following domains at the accredited school to be the Graduate Sports Rehabilitator (GSR): 1) prevention, 2) recognition, evaluation and assessment, 3) immediate care, 4) treatment, rehabilitation and reconditioning, 5) professional responsibility and development. Once GSR and physiotherapist complete the internship and more specific education, they are eligible to take the certification examination of Sports Trainer, and obtain the Certified Sports Trainer (BASRaT, 2003). However, Booth (2002) states physiotherapists provide a valuable injury management service to a vast number of athletes. He also suggests they should be chartered to work at any level of sport. They still have different ways to work in sports, such as Certified Sports Trainer or

physiotherapists.

In Australia, there are sports trainer and sports physiotherapist. Sports Medicine Australia (SMA) produces Sports Trainer to apply his/ her knowledge and skills to help make sport and recreation safer. There are level 1 and level 2 sports trainer depending on knowledge and skill, and seeking positions. The responsibilities of sports trainer are to prevent injury, to provide immediate assessment and management of sporting injuries, manage teams, educate athletes, and communicate with coaches (SMA, 2003). The Australia Physiotherapists Association (APA) is the solo voice of physiotherapists which included about 1,000 members. In addition to the APA National Special Group called Sports Physiotherapy Australia (SPA) has been established to provide better opportunity to further their knowledge in sports physiotherapy via sports coverage opportunities. Members are supported throughout their career pathway with the Level 1, 2, 3 Sports Physiotherapy courses. They also have the opportunity to become APA Sports Physiotherapists after postgraduate study (APA, 2003). Both Sports Trainer and Sports Physiotherapist are branched out from the SMA, and they have been expanding.

In South Africa, there is the Biokinetics Association for biokineticists. Biokineticist is a specialized exercise therapist that functions in professional alliance to health and medicine, and is recognized by and registered with the Health Professions Council of South Africa. A Biokineticist improves a person's physical status and quality of life through individualized assessment and exercise prescription in the dual context of clinical pathology (acute and chronic) and performance enhancement. Education of Biokinetics training is four years of academic education and two years of professional exposure. The Biokinetics programs are as approved by the Health Professions Council of South Africa (Biokinetics Association of South Africa, 2003). It associates with South Africa Sports Medicine Association, and probably similar to athletic training in this country.

World Federation of Athletic Training and Therapy (WFATT) is a coalition of national organizations of health care professionals in the fields of sport, exercise, injury/illness prevention and treatment to promote quality health care worldwide for active populations. The WFATT states the goals are to create global exchanging about health care, to provide research efforts and improve quality of health care, to develop health care profession, to promote international and domestic relationship with sport and health care. The member of WFATT approved by the president of WFATT after attending at least one World Congress or business meeting (WFATT, 2003).

There are some similar certifications and associations over the world, and occurs world conference or meeting together. However, some people come to learn athletic training in the U.S. There were about 420 Asian and Pacific, and 420 Hispanic ATCs in 2000. In addition, there were about 670 Asian and Pacific ATCs, and 450 Hispanic ATCs in 2001. Although they are only two to three per cent of all ATCs, it is an excellent method of promoting an international association of athletic training with sharing different information and experience from various situations and backgrounds (NATA, 2003).

Current trends from tours

As part of this research visits were made to see various athletic training rooms to better identify current trends in Japan. These tours occurred in July 2002 and included three different training rooms. The Tokai University, Osaka University of Health and Sports Sciences, and one of the J-league team, Nagoya Grampus Eight were visited. Pictures of these facilities may be located in appendix C.

Tokai University has been improving the JASA athletic training education programs. One of the ATCs, Aso, is now a full time staff person having started as a part

time employee in 2001. He started an athletic training internship at Tokai University in 1995, and has tried to provide the practical setting for students. There is one main training room, which has KinCom and some modality machines. Since there are physicians on campus, there are some modality machines in the training room. There is one more training room only for the football team. He made a taping table for the football training room since they do not have much of a budget to buy taping tables. In addition, athletes have to buy their own tape. Teams typically purchase a large order of tape, and then supply them to athletes at a reduced rate. This university has 31,481 students and 13 major including 68 departments, which is one of the largest universities in Japan. They have a reasonable size and quality of sports facilities including the athletic training room and weight room (Tokai University, 2003).

Osaka University of Health and Sports Sciences is an accredited JASA athletic training program. There is one ATC, Tsuruike, since 1997 as a full time staff. He completed construction of the training room for classes and practical setting in 2001. There are two whirlpools, two ice machines, taping tables, and exercise machine for rehabilitation. He also started the clinical classes for junior and senior students and students are required to complete 160 practical hours as a class. This University is one of the more developed universities with the decent size athletic training room and developed curriculum for a Japanese University (Tsuruike, 2002).

Nagoya Grampus Eight is one of the professional soccer teams. There are four full time people as medical staff, including an ATC, acupuncturist, physical therapist and Certified Strength and Conditioning Specialist. There are some modalities in the athletic training room.

Three tours to see the athletic training rooms was an excellent opportunity to identify current trends. This included two private schools, which have larger budgets than

public schools. Only one public school has an accredited JASA athletic training program. Although only one tour was with a professional soccer team, Japanese professional baseball teams may have different characteristic in athletic training rooms because baseball has more traditional trainer groups or systems.

Summary

There are various kinds of athletic trainers' definition in Japan because of the traditional routes of trainers. In addition, there are many different organizations due to a large variety of professional groups. Therefore, the Japan Amateur Sports Association set up athletic trainer certification in 1994 to try to take charge of these responsibilities. It is high evaluated to organize with common knowledge and standard skill of athletic training as the first step from complication. Although it might be confused, it does not guarantee profession or life as athletic trainer (Kiyoi, 1998). One of the ATC, who also has the JASA athletic trainer certification, explains that it does not have to be only way of athletic trainer. Every athletic trainer should have several special skills to help athlete's physical activity (Fujii, 2002). Various certificated people work together for the sports team as ideal because people would be able to learn each other. This idea is difficult to understand for traditional athletic trainer, and there are too many definitions of athletic trainer. However, several certifications should organize and work together instead of an individual certified community.

As a trend in athletic training in Japan, persons require not only athletic training certifications but also additional special skills because of the employment situation. Watanabe (2001) clarify that athletic trainer might need to take care of conditioning, nutrition, psychological support, team's management, or even interpretation. Sometime, ATCs prefer to hire because they can have a good communication with foreigner coaches

who speak English. On the other hand, Wada (2001) states an athletic trainer is not the medical profession, so they need to clarify the responsibility of that team, have flexibility of ideas, and leave the medical issues to medical certified people. On the point concerning the lack of athletic trainers, there are many young athletes who have fatal injury and others have carrier ending injuries. They also sustain additional injury because they return to sports activity before complete healing from injury (Kozeki, 2002). It also has been suggested that several wrong first aid for concussion at high school soccer game because there are not appropriate medical staffing at high school settings (Oshima, 2002).

It is just starting to organize and establish athletic training as a group. Connecting to different certifications as one certification or group is complicated and it has been controversial issues. Therefore, it should make clear the education and current trends of athletic training as a research. In addition, it may contribute the development of athletic training in Japan.

Chapter III

Methods

This is a descriptive research design using data collected from educators from Japan in the field of athletic training. This chapter explains the survey methods including the subjects, questionnaire and procedures used for data analysis.

Subjects

The subjects for this study were professors in Japan who taught athletic training or related subjects such as sports medicine and athletic rehabilitation, or were athletic training curriculum directors. The subjects were divided two different groups, either accredited or non-accredited programs recognized by the Japan Amateur Sports Association (JASA) athletic trainer certification. The accredited programs included 9 colleges, 1 graduate college (the same institution as one of the colleges), 1 community college, and 19 two or three-year vocational schools. Non-accredited programs were selected from the JASA accredited sports leaders' programs, which were 38 colleges. Non-accredited programs have sports related majors, such as sports science, health science, or lifetime sports, and they also study subjects including sports medicine, rehabilitation, first aid, exercise science, and massage therapy. In addition, some schools offered general courses required for JASA athletic trainer certification.

The subjects were sent the questionnaire by an electronic mail. The e-mail addresses were collected by searching each college's homepage or by requesting the e-mail address from the academic affairs office. There were limitations to collecting personal e-mail address due to privacy issues. E-mail addresses were collected from 10 accredited college programs (one from a graduate college which was same institution as one college,

so it was not sent), 7 vocational schools, and 26 non-accredited colleges. Nine academic affairs offices from non-accredited program colleges and 9 vocational schools were sent a cover letter and questionnaire to forward to the subjects. However, there were no responses from these e-mails. Therefore, the total number of subjects was 43, which included 10 accredited program colleges, 7 accredited vocational schools, and 26 non-accredited program colleges.

Questionnaire

The questionnaire for this study is included as Appendix B in English and Japanese. The questionnaire was filled out by professors of athletic training or related subjects, or by program coordinators at accredited and non-accredited schools. Questionnaires were sent by electronic mail with a cover letter. The cover letter for the questionnaire is included in Appendix B in English and Japanese. The cover letter explained the purpose and goals of the study to help the subjects provide meaningful answers. The letter also stated the benefits of the questionnaire and how subjects were selected. The letter stated that their responses would be used for research purposes only. In addition, there were a contact name, phone number, and e-mail address for any questions or concerns about the study. Finally, the letter expressed appreciation to the subjects for their help. All information was written in English, and then translated in Japanese.

The questionnaire was made up short simple questions to keep the questionnaire from being too time-consuming for the subjects. The questionnaire was written in English and edited by the Athletic Training Program Director and translated in Japanese and edited by the former professor in Japan, and finally it was sent to subjects. It was approved by the Institutional Review Board (IRB) of Marshall University. The questionnaire was divided into four parts; program, school education, clinical setting and students. The first

section asked about the current trends and the need for athletic training programs. The second section specified the education curriculum. Third section questioned the subjects about current clinical settings and needs. Finally it asked about students' motivation and their future careers.

Two weeks after sending all questionnaires, follow-up letters with the questionnaire attached was sent to increase the response rate. The follow-up letter reviewed the former e-mail and restated purpose of the study to clarify the questionnaire. The questionnaire was confusing to subjects from non-accredited programs because some questions were perceived as applying only to accredited programs. Additional information was added to the follow-up letter to correct this problem. In addition, the letter noted appreciation for their cooperation during a busy time, the beginning a new semester in Japanese schools. When the responses were returned, an appreciative response was immediately sent back to the professors.

Analysis

The data were collected to recognize the current athletic training education and certification in Japan. Frequency data for each question was calculated using Excel (Microsoft Office 2000) and a figure or table was created for visual understanding. The data were reported to demonstrate differences between accredited program and non-accredited program colleges. The data were used to explain the current trends of athletic training education in Japanese colleges.

Chapter IV

Results

The purpose of this study was to clarify current trends of Japanese athletic training education programs and certification. The questionnaire was sent by e-mail to professors of athletic training or related subjects, or department directors at JASA accredited program colleges and vocational schools, and non-accredited program colleges. This chapter will present the results using descriptive statistics.

Respondents

Subjects for this study were athletic trainers in Japan; 9 from accredited college programs, 7 from vocational schools, and 26 from non-accredited colleges for a total of 43 subjects (n=43).

There was an overall 61% response rate from accredited and non-accredited program schools. There were 26 questionnaires returned; 8 (80%) from college accredited programs, 5 (71%) from vocational accredited programs, and 13 (50%) from non-accredited programs. The response rate was over fifty percent, so it did provide valuable information to help explain the current trends of Japanese athletic training education and routes to certification. Table 1 shows the number of subjects asked to participate in the study, the number of respondents, and the response rate. Fifty percent of the respondents were from accredited schools including colleges and vocational schools, and 50% were from non-accredited colleges (Figure 1).

In addition, some questions were not clear to the subjects for the several reasons.

1) Accredited program schools have core courses for JASA athletic trainer certification, but some non-accredited program schools still have general courses for JASA athletic trainer

certification. Subjects were not sure they could answer as an accredited program for these general courses. 2) Accredited programs indicate that students can take general and core courses at that school, but they do not have to have a major for athletic training. Their major could be physical education, health science, or lifetime sports. Therefore, subjects were not sure what they should call this program, and how they should answer those questions. This caused some misunderstandings and incorrect responses for some questions. Some professors were concerned about the questions, which could be due to the subjects' personal opinions and not the position of the school.

Program

Figures 1-9 and Table 1 represents the current program status of athletic training in Japanese schools. The athletic training programs surveyed were 50% from accredited programs (8 colleges and 5 vocational schools) and 50% from non-accredited programs (13 colleges). The accredited programs had from 7 to 80 students per year. On the other hand, non-accredited programs had from 69 to 366 students for the department, which was not a specific program of study. Only 17% of non-accredited programs planned on setting up an athletic training program in the future.

Figure 2 shows professors opinions of higher education in athletic training in Japan. Fifty-eight percent of the respondents wanted to create higher education opportunities in athletic training. Figure 3 indicates either a positive or negative opinion of higher education in athletic training according to the type of program. Eighty-eight percent of the accredited program colleges' professors had an interest in higher education programs, and only 46% of non-accredited program professors had an interest in higher education for athletic trainers.

Figure 4 indicates the interest of the professors in cooperating with a U.S.

university. Overall 88% of the programs were interested in cooperative athletic training programs with an U.S. university. All accredited program colleges and vocational schools were interested in a cooperative program. In addition, 77% of non-accredited program colleges had an interest in cooperating with a U.S. athletic training education program. Figure 5 represents the number of schools and the percentage of schools interested in a cooperative athletic training arrangement according to program type.

Overall, 64% of the professors reported athletic training education had been developing lately in Japan. Figure 6 shows professors' opinions of whether or not athletic training education was developing. Additionally, 88% of accredited college programs' professors stated Japanese athletic training education had been expanding and developing. However, 58% of non-accredited program professors had a negative opinion regarding the progression of athletic training education recently in Japan. Figure 7 indicates the number and percentage of respondents according to program type relative to the development of athletic training education.

Figure 8 indicates 67% of both accredited and non-accredited schools' professors thought athletic training education was beneficial for the Japanese job market. Seventy-one percent of accredited program's professors and 67% of non-accredited program's professors stated a positive opinion of Japanese athletic training education in terms of the job market. Figure 9 shows the number and percentage of responses in each program category as they relate to the benefits of Japanese athletic training education to the job market.

Education

Figures 10-13 and Tables 2 and 3 indicate current education program status of athletic training in Japan. The number of core courses ranged from 4 to 28 with an overall

mean of 16 (84%). For both accredited and non-accredited schools, the most common core courses were exercise physiology and kinesiology/ biomechanics. In addition, about 80% of the schools offered psychology, nutrition, human anatomy, human physiology, and first aid. Other courses listed included conditioning, conditioning lab, taping lab, and sports and massage. Figure 10 shows the core courses reported according to the type of program.

Overall, there was a range of 2 to 23 full time staff (mean=9) and from 0 to 17 part time staff (mean=6) at each institution. There were from 3 to 23 full time staff (mean=9.7), and from 0 to 6 part time staff (mean=2.7) for accredited program colleges. For vocational schools, there were from 2 to 5 full time staff (mean=3), and from 0 to 17 part time staff (mean=7.4). Non-accredited program colleges had from 2 to 18 full time staff (mean=11), and from 0 to 14 part time staff (mean=7). Table 2 shows the mean number of professor's in each type of program. Overall, male full time staff was 95%, but female full time staff was only 5%. In addition, male part time staff was 82%, and female part time staff was 18%. For college programs, 92% of the full time staff was male and 8% of the full time staff was female. Eighty-three percent of the part time staff was male and 17% of the part time staff was female. Table 3 shows the number of professors in each program type relative to full time, part time, and gender.

Both full time and part time staffs' backgrounds were varied. Eighty-one percent schools had a medical doctor (M.D.), 65% schools had a licensed physical education teacher, 50% schools had JASA athletic trainer, and only 23% schools had an ATC. Sixty-three percent of the accredited program colleges had a JASA athletic trainer, and 25% of colleges had an ATC. On the other hand, 23% of non-accredited program colleges had JASA athletic trainer, and only 8% had an ATC. Figure 11 shows the number of professors with various certifications relative to program type.

Staffs at the various schools teach from 1 to 9 classes (mean=3.9) per week at accredited and non-accredited schools. At colleges, the staff teaches more than three classes, at vocational schools, including of part time staff, professors teach at most three classes. Teachers at accredited program colleges have to teach from 2 to 11 classes (mean=5.4) and at non-accredited program colleges were from 5 to 9 classes, (mean=5.8), but at vocational schools were only from 1 to 3 (mean=2.3).

Figure 12 shows professors opinions of increasing the number of athletic training courses. Fifty-five percent of all respondents were interested in adding more athletic training courses such as advanced athletic training, orthopedic assessment, clinical lab, internship and sports management. One professor wanted courses to prepare the student to be an ATC. The non-accredited program schools wanted to have more athletic training related classes. Non-accredited program colleges wanted more athletic training courses than accredited program colleges. Figure 13 shows the number and percentage of professors' responding to the question of increasing the number of athletic training courses according to program type.

Practical Setting

Figures 14- 24 relate to questions about the practical setting for athletic training education. Figure 14 indicates the number of subjects overall who responded that the practical setting was a part of their program. Fifty-six percent of all respondents stated that practical settings existed for student athletic trainers. Seventy-five percent of accredited program colleges noted providing some practical settings; however, only 25% of non-accredited program colleges provided practical settings. On the other hand, 100% of vocational schools had practical settings. Figure 15 indicates the number and percentage of respondents who provide practical experiences to student athletic trainers at accredited

and non-accredited schools.

Types of practical settings varied for each school. College settings were most likely to provide student athletic trainers' with practical experiences. The second setting for student athletic trainer to gain practical experience was a clinic. Accredited college programs provided more experiences in the college setting than others. Vocational schools had more high school, clinic, and industrial and commercial settings than others. Figure 16 shows the number of clinical settings at both accredited and non-accredited schools.

Figure 17 indicates the percentage of practical experiences considered as coursework. Fifty-seven percent of schools accept practical experiences for coursework. Fifty percent of accredited college programs counted practical experiences, but only 33% of non-accredited college programs permitted practical experiences to count as coursework. Eighty percent of accredited vocational schools permitted clinical experiences to be counted as coursework. On the other hand, all professors who stated their students did not have a practical setting experience thought the students needed these experiences as a student athletic trainer. Figure 18 shows the number and percentage of practical experiences considered for credit at both accredited and non-accredited schools.

Figures 19 and 20 indicate the presence and number of supervisors at clinical sites. At the clinical site, 53% of the schools had supervisors to educate students including of 59% of subjects' professors. The mean number of supervisors per site was 1.9. Figures 21 and 22 indicate if the respondent actually supervised students. Fifty-seven percent of accredited program colleges have supervisors, however only 17% of non-accredited program colleges did not have supervisors. Thirty-eight percent of colleges have a supervisor, and all vocational schools had supervisors at the clinical site. Seventy-one percent of the accredited program college professors stated they supervised students, and 40% of non-accredited program college professors supervised students. All professors

who noted there were no supervisors on clinical site supported the need for supervisors.

In addition, 64% of the schools had facilities for athletic training practical experience. Seventy-five percent of accredited program colleges had a facility, while only 42% of non-accredited program colleges did. All vocational schools noted they had some facilities. Figures 23 and 24 indicate the existence and number of athletic training facilities at an institution.

Students

Figures 25-39 relate to current trends in athletic training students from the professors' viewpoint. Overall, professors evaluated their students' motivation for learning as follows: 37% good, 27% excellent, 27% fair, and 9% poor. Accredited program colleges had 50% excellent and good student motivation. Non-accredited program colleges had only 9% excellent and 27% good student motivation. Although 18% of the non-accredited programs had poor students, there were no responses categorizing student motivation as "very poor". Figures 25 and 26 describe the student's motivation in athletic training.

Professors also stated if their students' volunteer for additional experiences in the field of athletic training. Eighty-one percent of the professors noted their students' extra work, and all professors at the accredited program colleges and vocational school observed student volunteer hours. On the other hand, only 60% of non-accredited program colleges had students who volunteered. Forty percent of the students in non-accredited program colleges did not perform volunteer activity as a student athletic trainer. Figures 27 and 28 indicate the percentage of hours the students volunteered.

Professors reported that 95% of their students' were interested in pursuing certification as an JASA athletic trainer, ATC, physical therapist, acupuncturist, Judo

therapist massage therapist. Overall, 25% of students would attempt to become certified as a JASA athletic trainer, 19% as a physical therapist, 8% as a Judo therapist and massage therapist, and only 2% NATA ATC. At the accredited program colleges, 32% were trying to become certified as a JASA athletic trainer, 19% as a physical therapist, and 5% as a JASA fitness instructor. At the non-accredited program colleges, 19% were trying for certification in physical therapy, 25% as a JASA fitness instructor, and only 13% as a JASA athletic trainer. Professors noted that only 5% of accredited program college students desiring certification as an ATC, and there was no interest in the ATC certification at non-accredited program schools. In addition, professors stated that some students would get Master's degree or Doctoral degree after graduation. Figures 29, 30, 31 and 32 indicate student certification interests from professors' views.

Relative to employment opportunities, 61% of professors thought students would not gain employment as an athletic trainer after graduation. Only 39% of professors felt students would have that opportunity. For accredited program colleges, 63% of the professors stated students would be able to get a job in the field, although only 10% of non-accredited program colleges' professors felt students would gain employment in their field. Figures 33 and 34 indicate the professors' opinions relative to the opportunity of employment as an athletic trainer.

Overall, 74% of professors thought the demand for athletic trainers was increasing. 88% of accredited program colleges' professors believed the demand for athletic trainers was increasing, and 60% of non accredited program colleges' professor believed the demand for athletic trainers was increasing. Figures 35 and 36 indicate the professors' views on the demand for athletic trainers in the current Japanese job market.

In the last section of the questionnaire, there was a space for the professors to comment. Many professors emphasized that they had noticed an increased demand for

athletic training, but due to economic depression, companies were not hiring athletic trainers. They stated they hoped the student would be able to gain an opportunity practice as an athletic trainer. Lastly, they felt the JASA athletic trainer system needed to gain popularity as the primary certification for athletic trainers in Japan.

Chapter V

Discussion and Conclusion

The purpose of this study was to clarify current trends of Japanese athletic training education programs using a questionnaire. This chapter will discuss the results of the questionnaires relative to current trends. In order to better explain questionnaire results the responses were categorized as program, education, practical setting, and students.

Discussion

The purpose of this study was to describe current trends of athletic training in Japan. It was difficult to gather information about trends in athletic training in Japan due to difficulty obtaining e-mail addresses and the lack of published literature on this topic. In order to gather information, school web sites provided e-mail addresses of some of the sports medicine professors. Some schools did not show individual e-mail addresses, in which academic affairs provided contact with appropriate professors. However, not many replied to my inquiry, therefore there were only 43 subjects compared to 67 estimated subjects. In addition, there was low response (61%) rate because it was one of the busiest seasons of the year and difficult to make contact with subjects due to Japanese traditions.

Through correspondence with the respondents, some of them were confused with certain questions on the questionnaire. The questions were those that asked for various explanations of their athletic training program. Even though accredited program schools did not having an athletic training program, students were able to take general and core courses for the JASA athletic trainer certification at accredited program schools, and general courses at some of the non-accredited program schools. As a result, some questions were not accurate, and were individual opinions by one professor from each

school. However, there is no literature on Japanese athletic training in English research. This study provides an overview of the current status of Japanese athletic training in the English language.

Program

According to the results, athletic training programs are currently being developed. The number of JASA athletic training programs has been increasing and gaining popularity in physical education or related colleges. This merging of departments is due to the similarity between physical education and athletic training in course content and curriculums. The NATA news (1997) states that most athletic training programs are housed in physical education departments in the U.S. First, physical educators are becoming less financially and politically viable because of the cutbacks of the 1970's. Secondly, the contents of modern athletic training programs in physical education curriculums are similar, and athletic training used to be a modified physical education curriculum. Now, athletic training course work is many times separated from traditional physical education departments and has been changed to an allied health profession.

In Japan, there are 81 universities, 31 community colleges, and 554 vocational schools that are physical education or sports related. There are 11 JASA accredited programs (9 of which are universities), 1 graduate school, and 1 community college, and 38 JASA sports instructor's accredited programs, which include some general courses for the JASA athletic trainer. In addition, there are 19 accredited vocational schools. Students at these schools are able to take general and/ or core courses as physical education students. Yamamoto (1994) states there are two reasons that accredited programs should develop from physical education or sports related departments; 1) significance of practical experience as a student athletic trainer in sports settings 2) similarity to the athletic training

education curriculum governed by CAAHEP in the U.S. Although some accredited colleges and most accredited vocational schools have started programs like the accredited programs in the U.S. the rest of the schools still consider athletic training a part of their physical education or sports related programs. This means the program is not an independent major as with U.S. accredited athletic training programs. Students who want JASA athletic training certification take athletic training courses, but there are generally no specific programs students can enter. For this reason respondents may not have stated accurate numbers of students in their program. Some subjects responded with the number of physical education students while others responded with the number of athletic training students.

One graduate college has started a JASA athletic training masters degree program and provides the JASA with athletic training educators. This school is one of the traditional physical education colleges and expanded to include various kinds of sports related fields. Unfortunately, no respondents returned questionnaires from this school. However students from this school are well known and play active roles in athletic training in Japan. Most professors at accredited programs stated they needed a graduate program for higher education, and stated it would produce athletic training educators.

Sixty-four percent of subjects thought athletic training was continually developing. Not many subjects from non-accredited programs noted positive responses with regard to the development of athletic training. Only 17% of non-accredited programs wanted to start an athletic training curriculum. One professor stated he wanted to start a program, but that was only his opinion, not his school's viewpoint. One of the problems was due to student population decreases; college student populations have been getting smaller due to fact that the population of children has already peaked, and now the population is decreasing or staying the same. Therefore, schools do not want to begin a new curriculum

for a smaller number of applicants. However, the JASA started an accredited athletic training program at some schools to prepare students for the JASA certification examination. JASA's decision is a big step for Japanese athletic training education.

Sixty-seven percent of subjects stated athletic training was beneficial for the Japanese job market. Although the answers did not show students would be able to find a job as an athletic trainer, athletic training education was believed to be beneficial for one's personal and mental preparation for future jobs. In addition, future health care services are likely to be provided by multi-skilled individuals, which include athletic training, education, and health care. NATA News (1997) reported "The athletic trainer is already a multi-skilled professional." This statement promotes positive responses from non-accredited program respondents with regard to athletic training and promotes interest in athletic training education.

Cooperation with U.S. universities has been popular in the field of athletic training and many other college curriculums. Some schools offer exchange or internship programs in the U.S. during Japanese school vacation. Japanese students have associated athletic training with the U.S. and want to experience athletic training practices facilities in different setting in the U.S. Although more athletic training books have been translated into Japanese lately, many read English books with difficulty even though English is a second language required in junior high school and now required in elementary school. Since English is considered to be an essential language, most schools want to have some type of cooperation with U.S. universities. For this reasons 88% of schools in this study wanted athletic training program cooperation with U.S. universities.

Becker-Doyle (1996) states that Japanese universities are very interested in developing a system in Japan to educate and certify qualified athletic trainers. Japanese Universities want to produce the same quality of certified athletic trainers as the U.S. She

notes the NATABOC may allow foreign students to sit for the certification examination. In fact, courses can be transferred that were taken in foreign countries, and practical experience gained in a foreign country under ATCs can be counted toward eligibility for the NATABOC examination. She also explains the development of athletic training programs in Japan, which has been yet to be accomplished. There are faculty exchanges between some US and Japanese universities. Japanese students are allowed site visits at US universities for practical observations, but there is no practical experience involved. Therefore, it is interesting to know what the subjects think about cooperation with U.S. universities.

Education

Responses to the questionnaire showed that Japanese athletic training education is quite similar to CAAHEP accredited programs. Definition of core courses was different between each school, which made it difficult to distinguish courses by course name only. Therefore core course accuracy is difficult to comment on.

Core and general courses for JASA athletic training did not include therapeutic modalities or administration of athletic training. In Japan, people cannot use modalities without a medical certification. Not many schools have modalities in their training rooms, so athletes must go to a clinic to have treatments such as ultrasound, electronic stimulation, and/ or massage. JATO (1996) states 42.9% of athletes go a Judo therapist's clinic, 26.2% go to acupuncturists, and 23.1% go to sports doctors. This is a common situation when athletes get injured at college or the high school level because of the absence of athletic trainers or lack of treatment facilities.

Instead of modality courses, massage lab courses were reported by a high percentage of respondents. This originates from traditional Japanese therapeutic methods,

and athletic trainers are still misunderstood as massage trainers or therapists. Japanese athletes need cool down or practice prevention exercises on their own, known in Japan as self-administration (without being asked by somebody to do massage or treatment). Educating the athletes is one of the athletic trainer's responsibilities. Instead of administration of athletic training, sports management of local community, role of athletic trainer, doping control, and safety were reported as core courses work for the JASA athletic training curriculum. These courses do not include of management and planning of budgeting supplies and record keeping like courses on the administration of athletic training in the U.S. However, curriculum courses have to match each country's demands individually, therefore Japanese curriculums do not have the same core courses as American curriculums. It is believed the Japanese ATCs have better record keeping skills than traditional trainers because they are trained to prepare for lawsuits, which are more common in the U.S., and not as common in Japan.

The respondents were asked the number of professors by status and gender. In the U.S. 50% of ATC's are female however this researcher was unable to find a number of female educators. The data in this study indicated that only 5% of athletic training educators were female. There was considerable news in Japan and the U.S. regarding the first female NFL athletic trainer, who happened to be a Japanese ATC. This is significant since there are no currently female athletic trainers at professional baseball venues in Japan. In addition, only 8% of female full-time professors were at sports related colleges. The reported percentage of female professors is due to the fact that two women's colleges responded, and generally there are more female professors at this type of college than other colleges. Japanese sports and other societies have changed without distinction to gender of professions, but it is well publicized by the media if a female gains a premier profession. It is still uncommon for females to become gainfully employed in this profession, and when

one does become employed at a high level, it is considered news worthy.

Most professor certifications/degrees were Medical Doctors from sports related colleges. An interesting finding was that JASA athletic trainers ranked third among professor certifications. This showed the educator was competent in the field of athletic training and would be able to teach it to their students. The professors teach various courses including one called “seminar”, which differs depending on each professor’s area of expertise. Students would draw from a professor’s expertise and present a thesis based on their experience in their senior year. One respondent stated that his students presented a thesis about their activities of student athletic trainer every year. This is the one way to learn more about athletic training in small groups with an educator.

Fifty-seven percent of subjects responded that they wanted more athletic training courses even though they did not have accredited programs in athletic training. These courses may help in the prevention and care of sports injuries or offer first aid when students act as educators in various sport settings, even though they are not certified athletic trainers.

Clinical setting

Only 56% of subjects answered “yes” regarding the existence of a practical experience setting, and only 57% of the respondents would count that experience for class. The JASA athletic training education system is highly regarded by the Japanese public due to the level of knowledge and skills of the JASA credentialed athletic training. This credentialing has decreased the amount of public confusion by distinguishing deferent between traditional trainers and athletic trainer. However, there is not a requirement to gain practical experience with supervisors for the JASA athletic training program. Yamamoto (2003) also notes that students are able to obtain more than just athletic training

certifications from these experiences. Physical and mental maturity is gained from the experiences including character development. In addition, he explains there are a few opportunities to be an athletic trainer, but students could learn more than athletic training as student trainers, which allow them to use their athletic training and people skills. Tsuruike (2002) also explains that practical training forces students to learn communication skills between coaches, physicians, and athletes. In addition, the practical setting offers a place to learn administration and management of athletic training. This creates unique athletic training education and athletic trainers.

Even though every professor reported that students should gain experience as student athletic trainers, there were no required hours for JASA student athletic trainers. Schools did not have to design a class that offered practical experiences, therefore this system of education either never developed or is developing slowly. Practical experience is an important component in the development of the student athletic trainer, and therefore it should be part of the educational curriculum requirements.

Even though formal practical experience is not required, most students have opportunities to gain experience with a college team as a volunteer. Students who are interested in athletic training start volunteering as a student athletic trainer with a college and do so for four years, similar to an athletes' experience. Clinical settings at sports related colleges are suitable for sports injury prevention and treatment experience, since sports activity is an essential component of the sports related college curriculum.

Only 38% of colleges had supervisors for the practical setting. Students learn from the professor in class and gain their experience on their own. Every respondent knew students need a supervisor to learn from and work with, however there is not enough staff for students to gain practical experience at college settings. One hundred percent of vocational schools had supervisors in the practical setting because they found a way for the

students to count practical experience as one of the core classes. However, the practical experience is different from school to school, so it is hard to learn administration and management because the student is only at each setting a short time.

Fifty-nine percent of professors were supervising students and teaching as an academic professor. Their responses were confusing since their supervision might mean something different than the ATC's supervision. They responded that there were no supervisors at the practical setting but stated they were doing supervision. One ATC stated that a limitation of student supervision by a Japanese supervisor is that a typical Japanese program will have between 80 and 100 students, which make it difficult for one person to supervise every student (Kiyoi, 1998). Anderson, Larson & Luebe (1997) also explains quality and skills of student athletic trainers has changed with the quality of supervision. For quality student education, each supervisor's situation has to be considered individually.

Japanese athletic training rooms are different from U.S. facilities. There are not many schools with taping tables, treatment tables, modalities, or a room for supplies. There were only two schools that had athletic training rooms in 1994, but since have developed and expanded, sixty-four percent of this study's respondents answered that they had a facility for an athletic training clinical experience. However there seemed to be some confusion in terminology. Some referred to practical lab settings and others referred to operational facilities (e.g. athletic training room). It is believed that there are still a few schools that offer practical experience in an athletic training room.

Students

Students at sports related schools are very motivated to study. Sixty-four percent of respondents stated their students were excellent or good with regard to motivation. Yamamoto (2003) states more high school students or their parents are asking where they

can study athletic training, or how they can become an athletic trainer. Although there is only one “sports trainer department” in all of the Japanese universities, and less than 10 universities have a JASA accredited program, students at these schools are highly motivated in order to gain an opportunity to be an athletic trainer in Japan.

Eighty-two percent of respondents noted their students gained experience as a volunteer on their own. They voluntarily obtain practical experience in athletic training since they are not required to gain experience. They are also willing to gain more experience if they courses were offered for practical experience. This showed students had a high learning motivation for athletic training. In addition, students know if they do not gain any experience as athletic trainer, they cannot gain athletic training experience from academic courses.

Ninety-five percent of the respondents stated that their students tried to get certifications after graduation. With the current business depression in Japan, students try to get as many certifications as possible to show their skills to a company. Since most respondents were JASA accredited programs, 25% of respondents were interested in JASA athletic trainer certification. Respondents stated that 19 % of students wished to pursue a career in physical therapy. The pursuit of a physical therapist certification has grown in popularity because it is not only for the athletes, but also for all of the population. It is estimated that 22% of the Japanese population will be older than 65 in 2010. This is a driving force in the increase of the popularity of physical therapists.

Seventy-four percent of respondents answered that the demand for athletic trainers has been increasing even though only 39% of them thought their students would have an employment opportunity. The lack of recognition for athletic training by the Japanese sports administration and the Japanese society in general makes it difficult to enter athletic training as a profession in Japan. Although the ideal job position for athletic

training is similar to the U.S., it is still difficult to obtain, and one often needs a team connection to get a job. It is a frustrating problem for educators because there are many students who want to study athletic training and be athletic trainer. But there are not many opportunities as an athletic trainer in the Japanese sports administration and Japanese society in general.

There are some opportunities for an athletic trainer to practice in other professions. One can teach for a junior high school, high school, or university, and practice athletic training. In addition, one can be a school nurse, since the school nurse or physical education teacher initiates evaluation and first aid for most of the athlete's injuries at schools. This is the realistic way to practice due to budget of the Japanese sports administration and other societies. NATA News (1997) states that the high school environment has been a key employment setting for athletic trainers for many years. High school athletic training has been expanding in the U.S., but Japanese high school athletic training is not as promising. There is no way to have full time athletic trainers at the high school level due to budget of the Japanese sports administration and other societies.

Summary

The purpose of this study was to explain current trends of Japanese athletic training education and certification. The literature was searched to explain history and detail of athletic training in Japan. A questionnaire was given to sports medicine professors at JASA athletic trainer's accredited programs or sports leader's accredited programs to establish the current situation of education and demand for the future.

It is unclear how athletic training is defined in Japan because each person called "trainer" has different routes of education and certifications. Each person background has been credentialed by different organizations (such as JASA athletic trainer, JATO for

Japanese ATC, and acupuncturists, massage therapists, and Judo therapists have other organization). Therefore, Japan Amateur Sports Association established a certification in 1994 in an effort to establish a norm. Although JASA athletic training programs have developed a standard knowledge and skills, athletic trainers have to do their best to gain a job because there are few opportunities to be a professional athletic trainer in the Japanese sports administration and other societies. However, the JASA athletic trainer certification has gained acceptance by providing organization and standardization of the process of becoming an athletic trainer.

Sixty-one percent of respondents defined the current educational system in their opinion for their students. At the JASA athletic trainers' program school, students can take required courses for certification examination eligibility. Half of the respondents had the JASA accredited program at their college or vocational school. They believed athletic training education has progressed in its development and is beneficial for the Japanese job market. They were willing to set up graduate level athletic training education programs and have cooperated programs with U.S. universities. There were similar curriculums between the CAAHEP program requirements of Japanese sports related university requirements. Some respondents wanted more athletic training courses at their schools. A majority of teachers were male and were medical doctors, JASA athletic trainers, or physical education teachers. Some students had an opportunity to gain practical experience as a class with college sports teams, clinics, or high school sports teams. While there were no requirements of practical experience for the JASA athletic training students, respondents supported the student need for supervised experience. Although there were some facilities to teach practical experiences, there was not enough staff to teach and supervise athletic training practical experience at the same time. Currently, Japanese students have a high motivation to gain both academic and practical experiences. This is evidence since there

were not requirements to gain practical experience, but a majority of students tried to get practical experiences on their own. A majority of the Japanese students tended to be interested in certifications, such as JASA athletic trainer and physical therapist. Subjects believed the demand for athletic trainers has increased, even though there are not many opportunities to obtain athletic training professions.

The results of this study showed Japanese athletic training education and certification is popular and increasing in demand. However, lack of the recognition of athletic training and not considering athletic training as a medical profession is still an issue. Japanese athletic trainers are required to be more than just an athletic trainer, they must also possess additional skills because of the employment situation. Since there are self-styled athletic trainers from different types of certifications, the JASA athletic training certification has created a certification to standardize athletic training. The JASA athletic training certification also had negative opinions because it may decrease the opportunity to be employed as an athletic trainer. In order to offer a better understanding of Japanese athletic training, this study has described current trends of Japanese athletic training education and practice. Hopefully, this study will contribute the development of Japanese athletic training and also to the Japanese sports society.

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Appendix A
Tables & Figures

Table 1

Numbers of subjects, respondents, and the response rate of the survey.

	Subjects	Respondents	Frequency
Accredited program University	10	7	80%
Non-accredited program Univ.	7	5	71%
Accredited program Vocational	26	13	50%
Total	43	26	61%

Figure 1.

Respondents to the survey according to type of program.

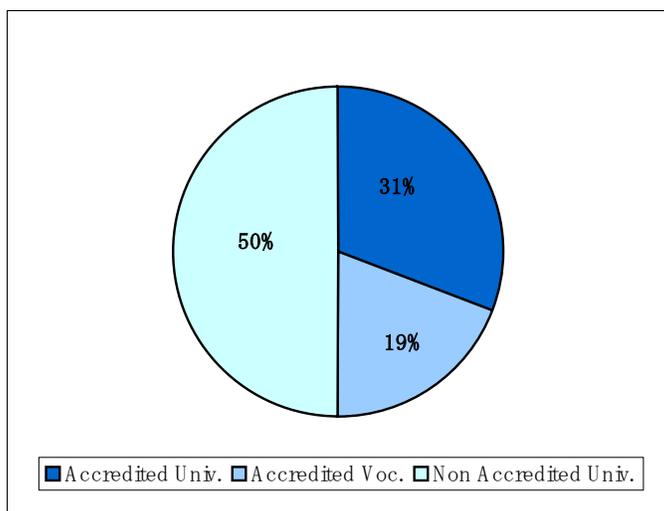


Figure 2.

Professors opinions of the need for higher education in athletic training in Japan

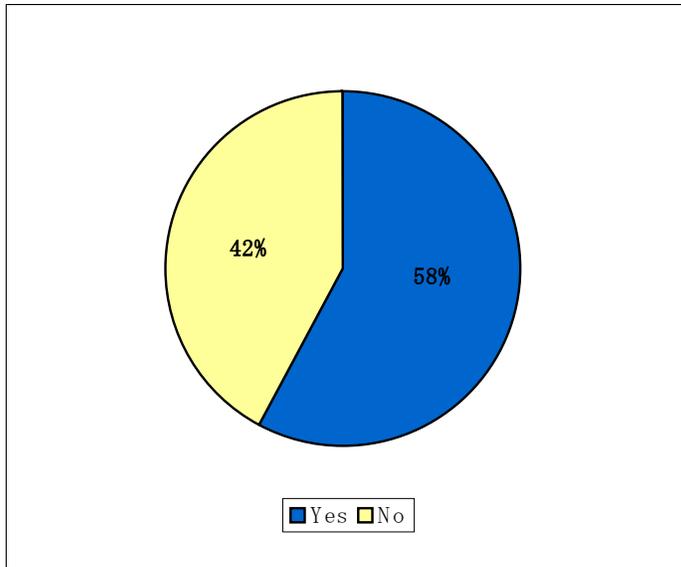


Figure 3.

Opinion of respondents regarding the need for higher education opportunities in Japan according to type of program

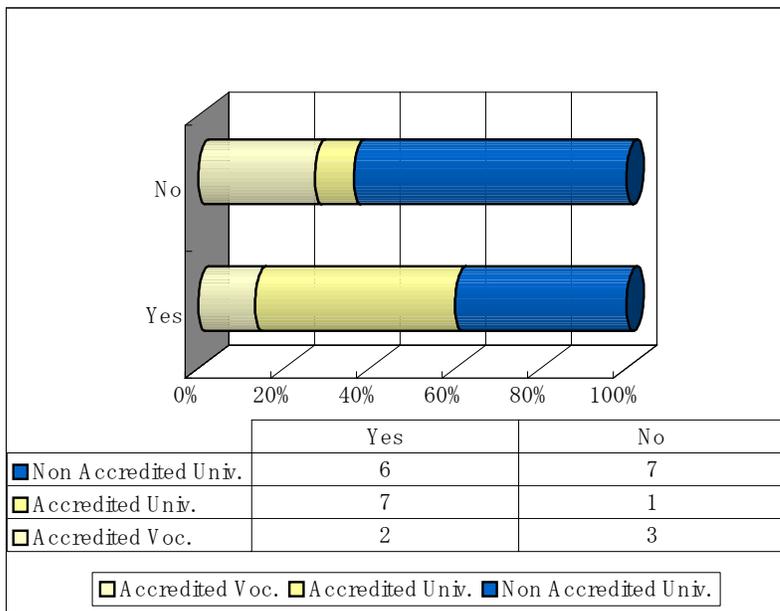


Figure 4.

Programs interested in a cooperative education program with a university in the U.S.

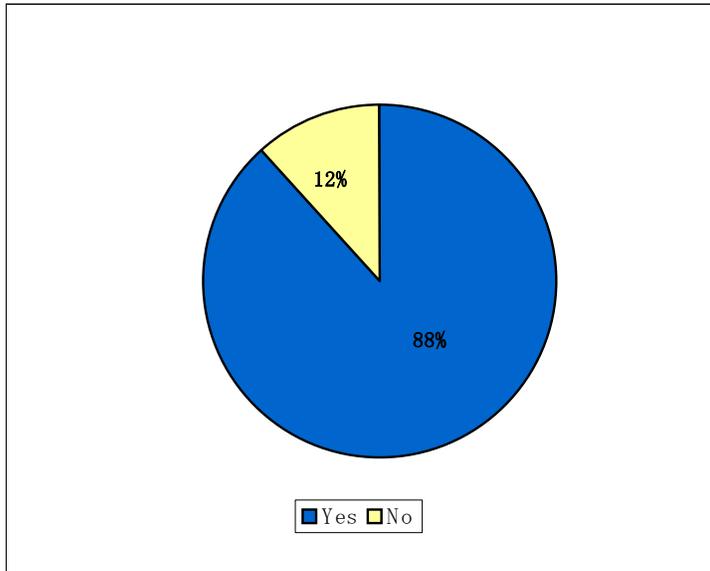


Figure 5.

Schools interested in a cooperative arrangement with a university in the U.S. according to program type.

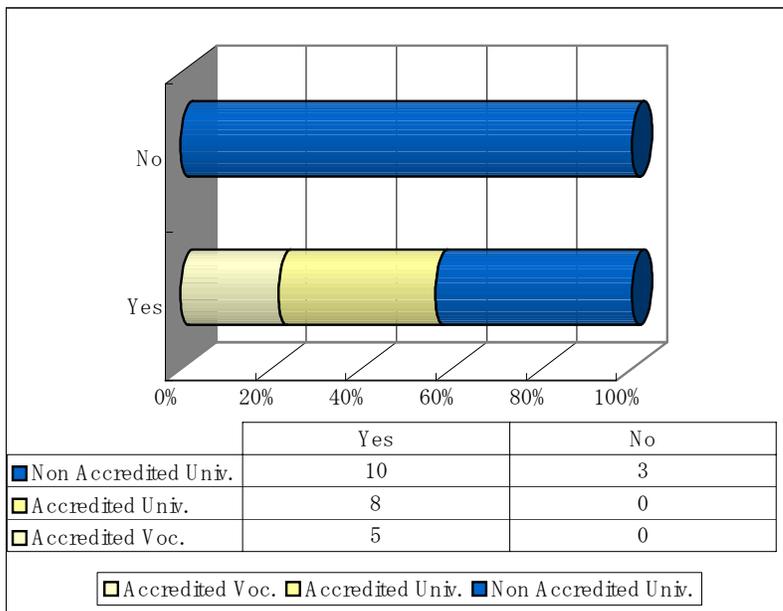


Figure 6.

Professors' opinions as to whether or not athletic training is developing as a profession in Japan.

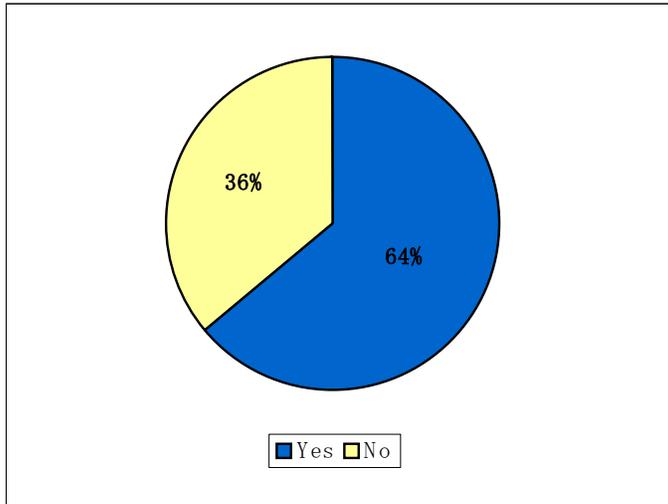


Figure 7.

The number and percentage of subjects who felt athletic training education was or was not developing in Japan relative to the type of program.

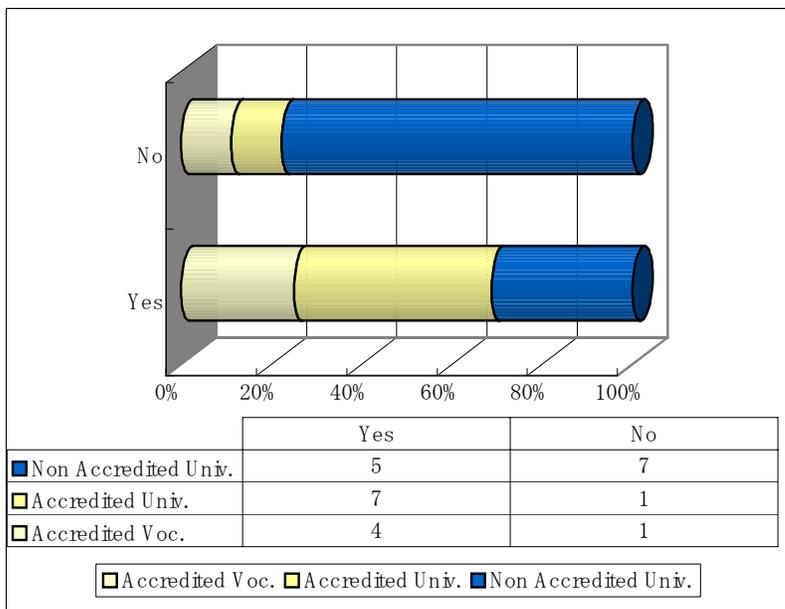


Figure 8.

Percentage of respondents who felt athletic training education was beneficial to the Japanese job market.

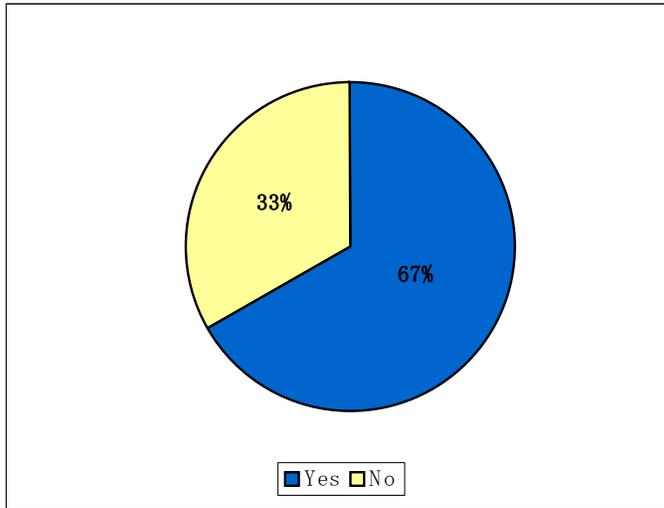


Figure 9.

Percentage of respondents who felt athletic training education was beneficial to the Japanese job market by program type.

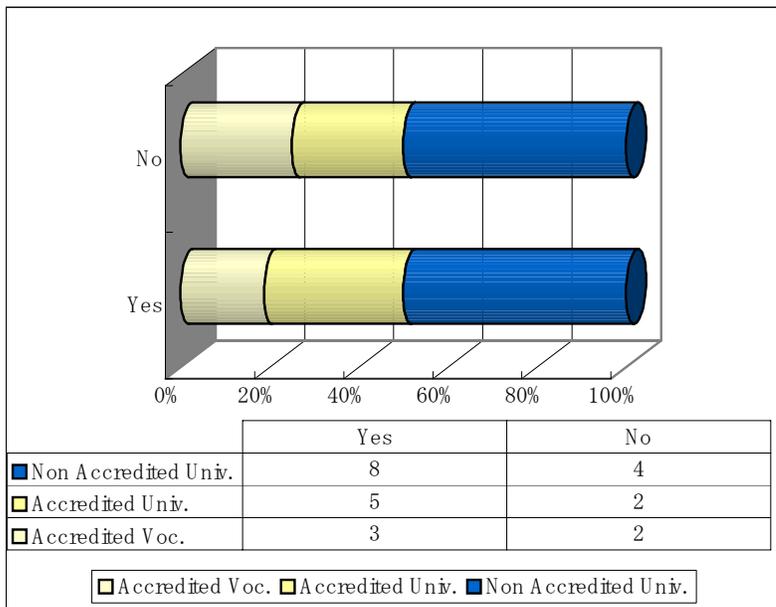
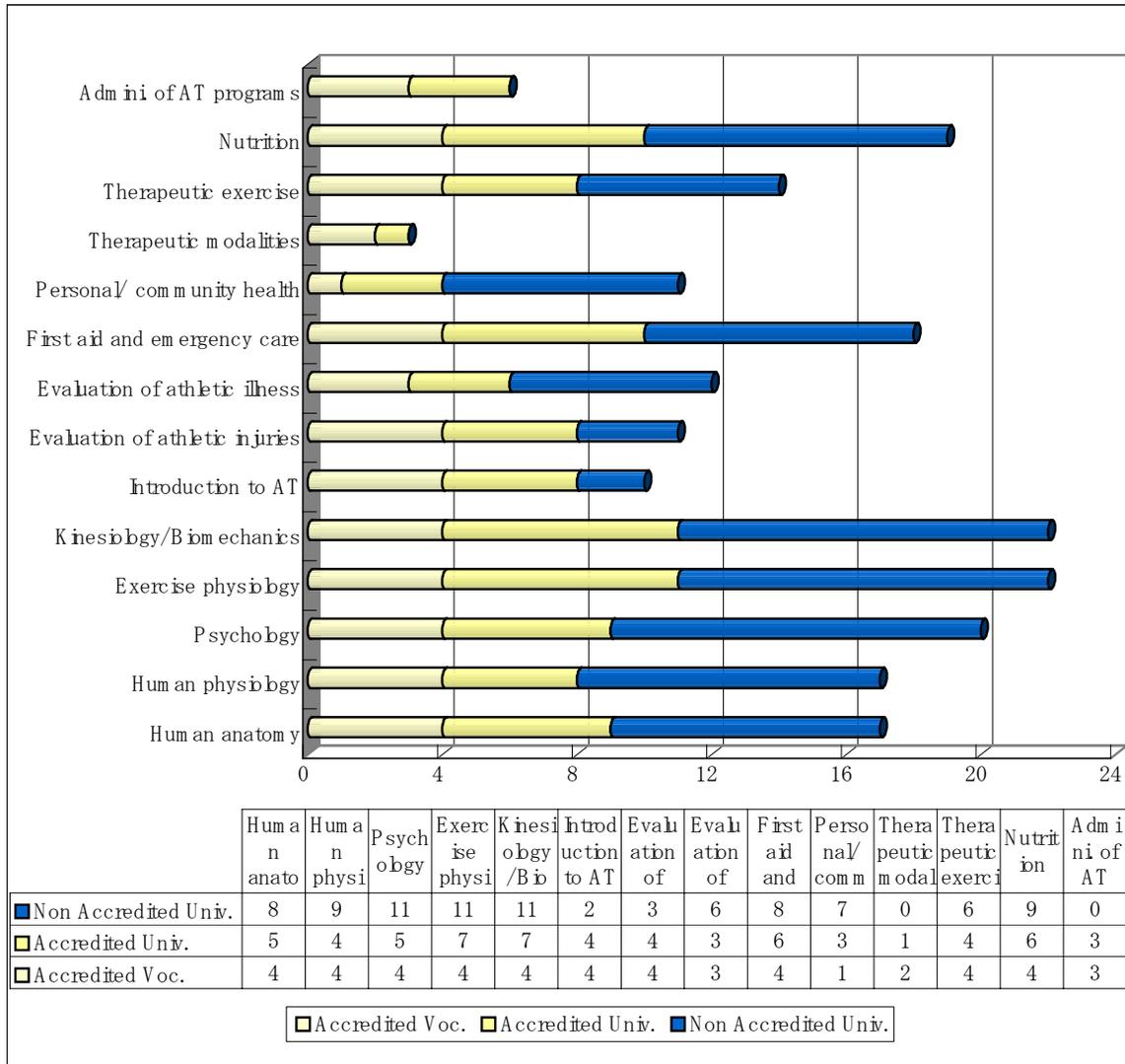


Figure 10.

The core courses offered at respondents schools according to program type.



Others; Conditioning 9, Taping lab 8, Conditioning lab 7, Sports massage 6 etc.

Table 2.

The numbers of professors teaching athletic training in the three types of athletic training programs.

	Full time	Part time
Accredited program University	9.7	2.7
Non-accredited program Univ.	11.1	7.0
Accredited program Vocational	3.0	7.4
College total	10.6	5.8
Total	9.0	6.0

Table 3.

Percentages of male and female full time and part time staff according to program type.

	Full time M	F	Part time M	F
Accredited program University	91	9	94	6
Non-accredited program Univ.	93	7	79	21
Accredited program Vocational	100	0	81	19
College Total	92	8	87	13
Total	95	5	85	15

Figure 11.

Number of professors with various certifications from each program type.

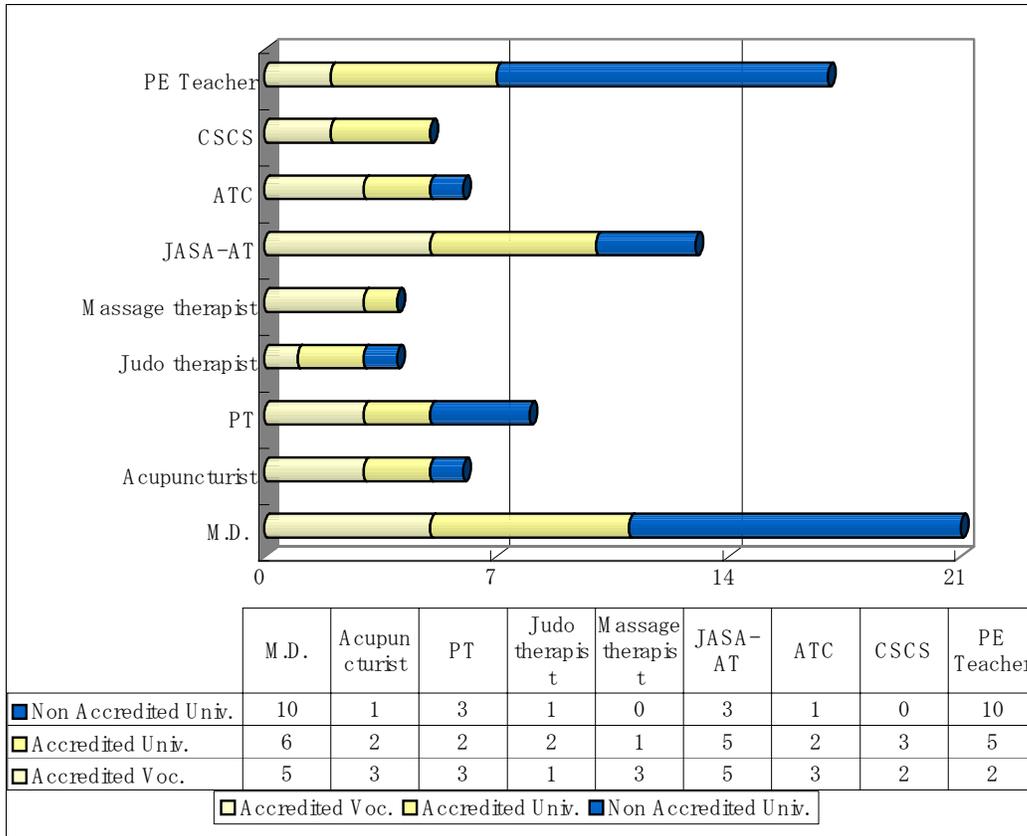


Figure 12.

Opinions of professors relating to adding more athletic training classes to the curriculum.

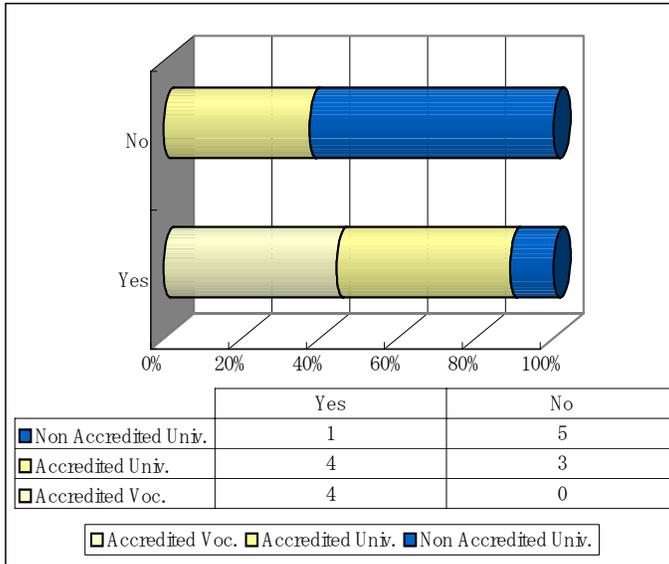


Figure 13.

The number and percentage of professors' responding yes or no to increasing the number of athletic training courses according to program type.

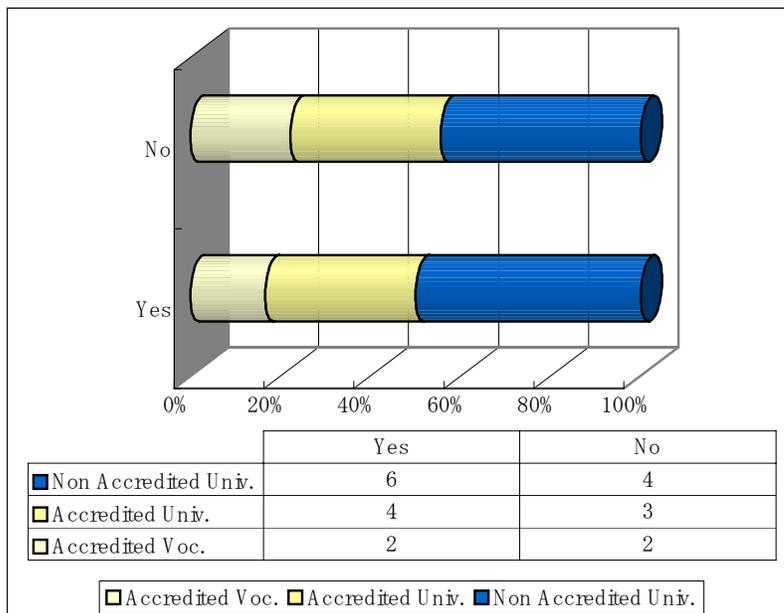


Figure 14.

Overall programs providing clinical settings for student athletic trainers.

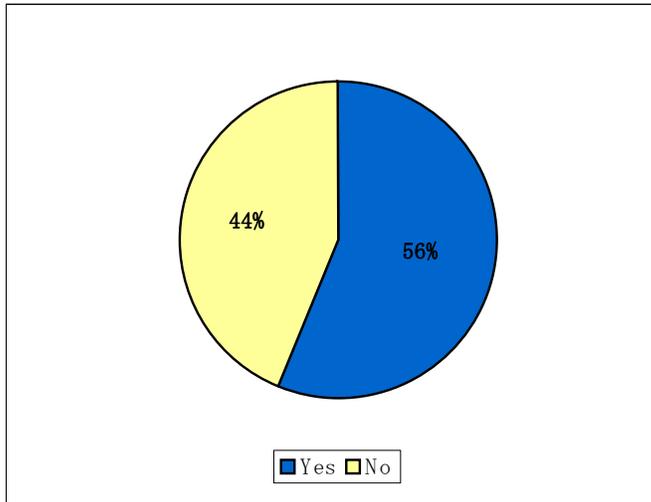


Figure 15.

The number and percentage of respondents providing clinical experiences for student athletic trainers at accredited and non-accredited schools.

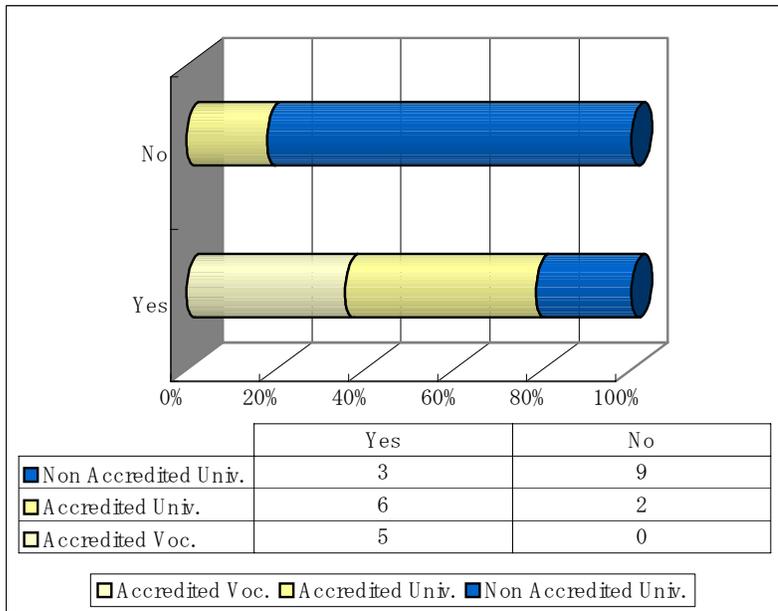


Figure 16.

The number of clinical settings at both accredited and non-accredited schools.

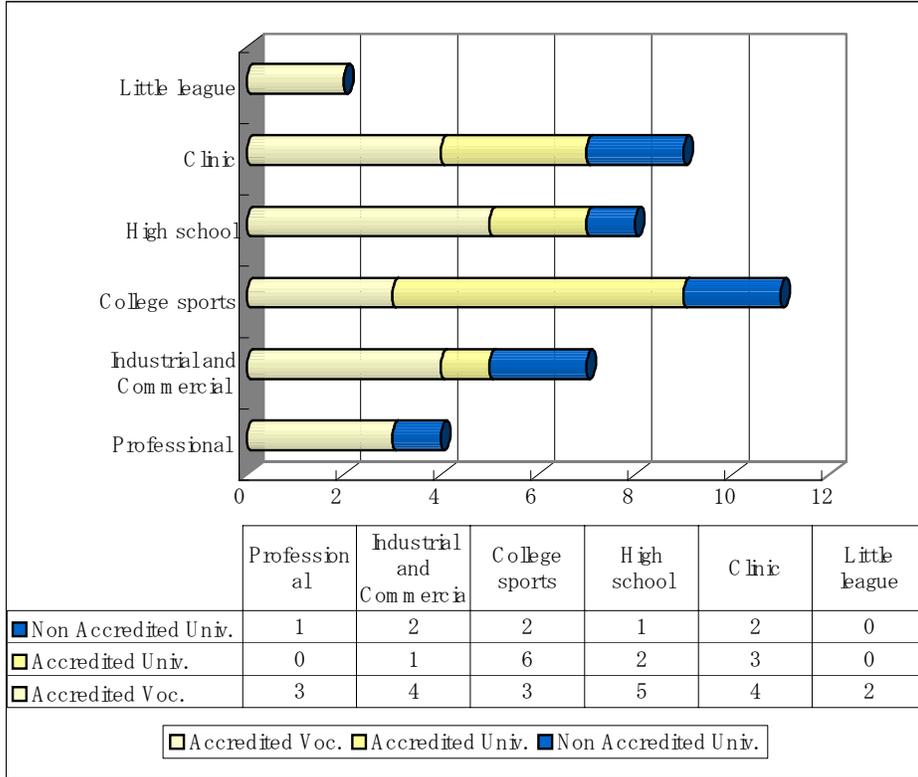


Figure 17.

The percentage respondents that give credit for clinical experiences as coursework.

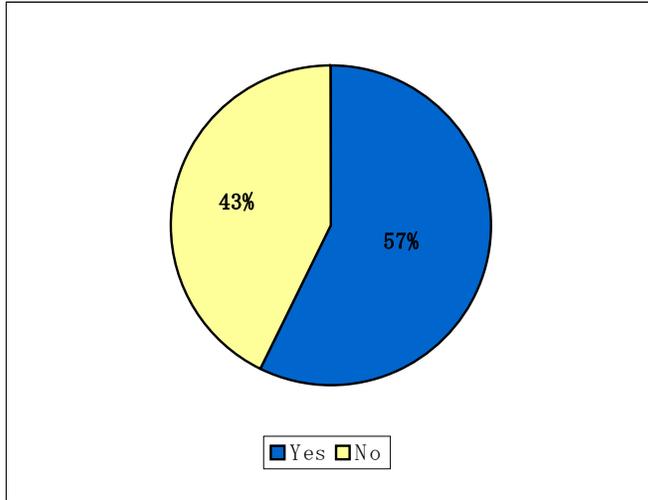


Figure 18

The percentage respondents that give credit for clinical experiences as coursework according to program type.

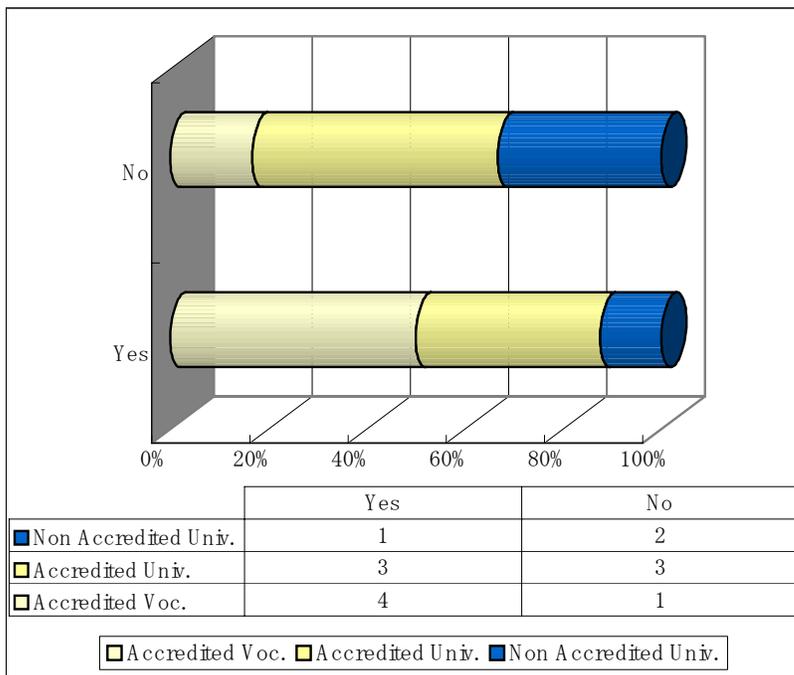


Figure 19.

The presence of supervisors at a clinical site.

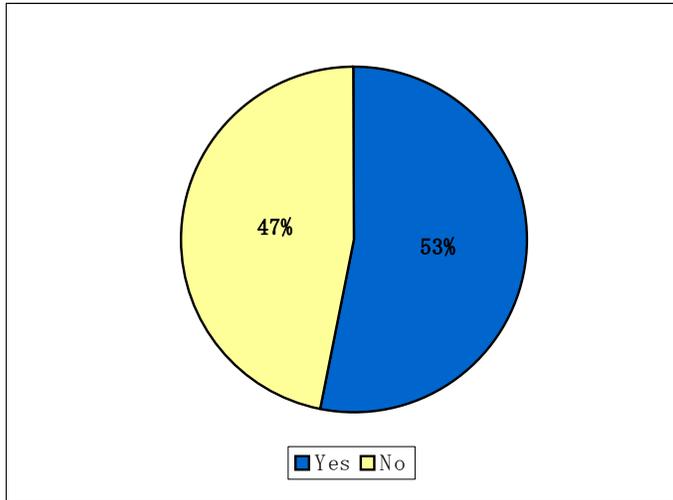


Figure 20.

The number of supervisors at a clinical site by program type.

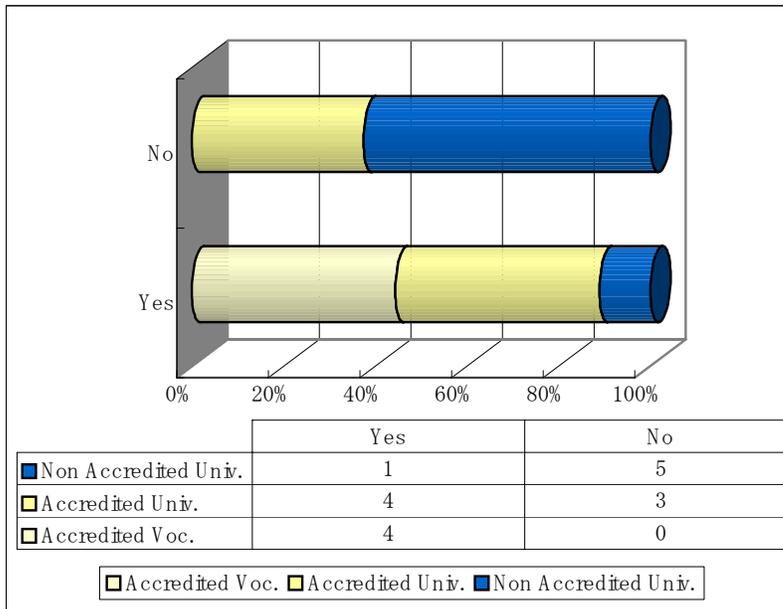


Figure 21.

The status of the respondent to the questionnaire as to whether or not they personally supervise students.

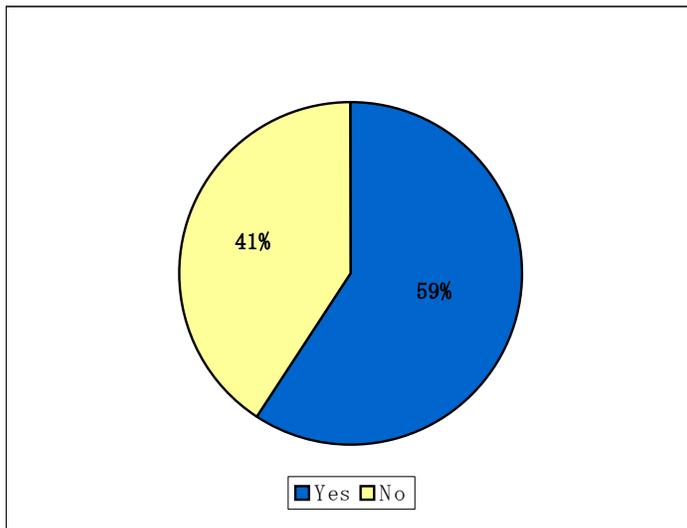


Figure 22.

The status of the respondent to the questionnaire as to whether or not they personally supervise students relative to program type.

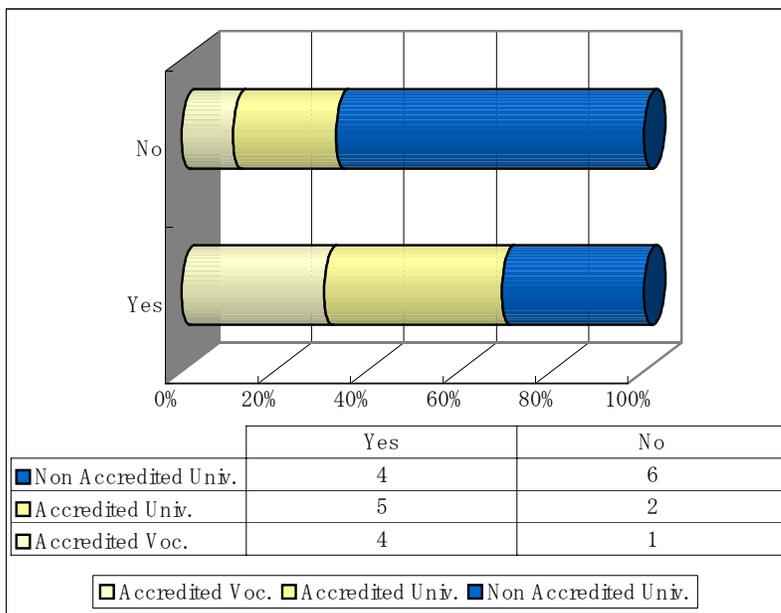


Figure 23.

The existence of athletic training facilities.

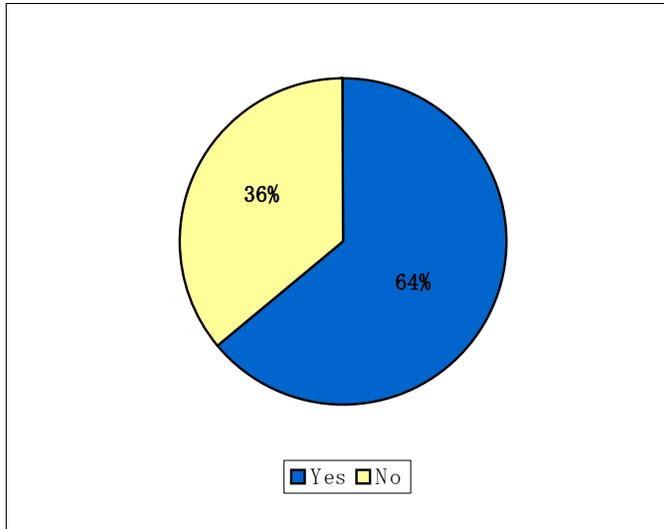


Figure 24.

The number of athletic training facilities relative to program type.

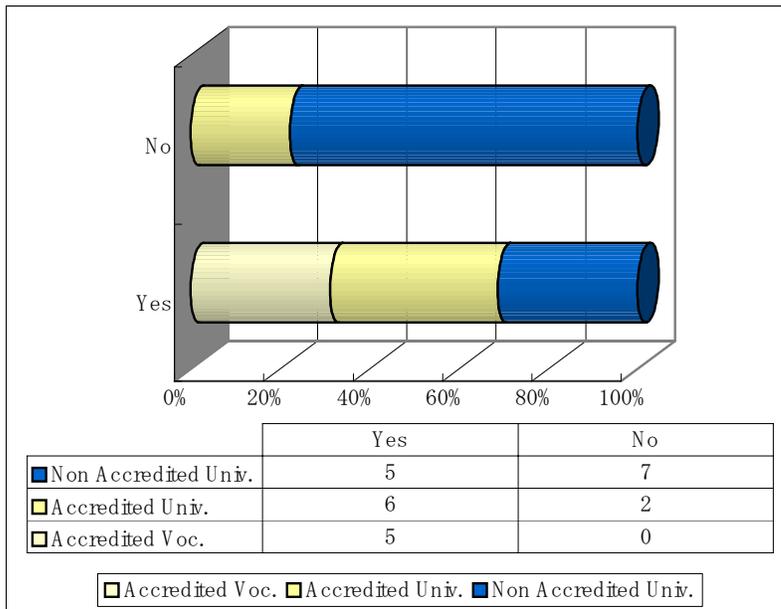


Figure 25.

Student motivation to succeed in athletic training as perceived by the professor.

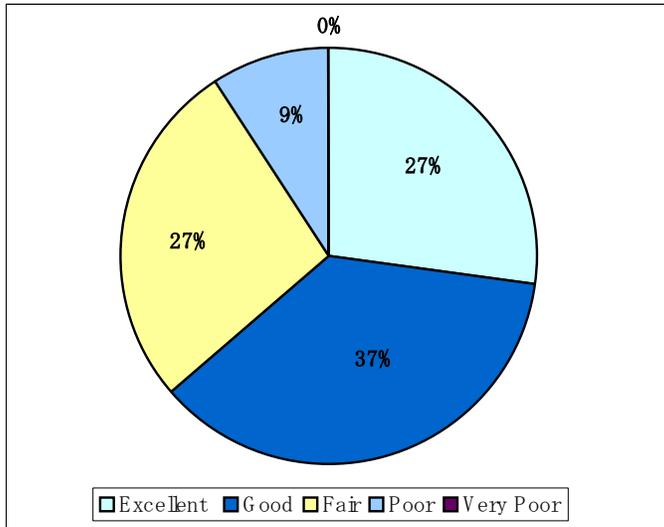


Figure 26.

Student motivation to succeed in athletic training as perceived by the professor and related to program type.

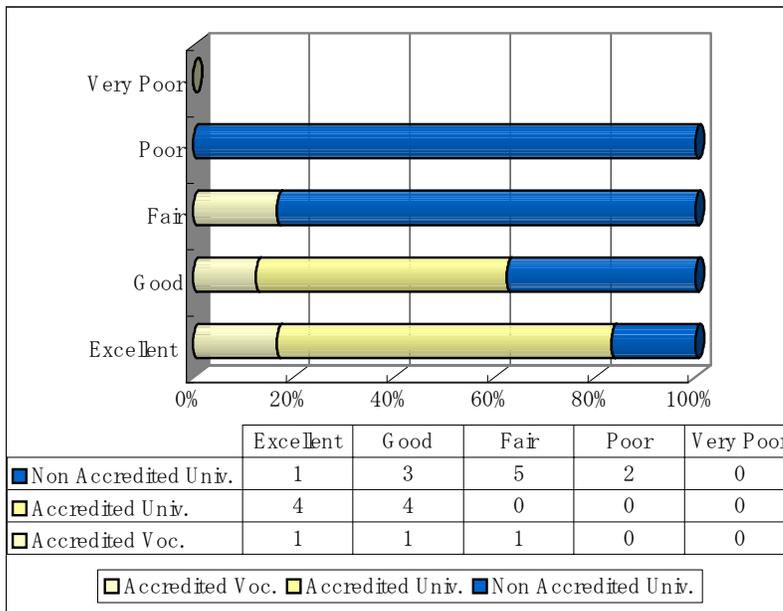


Figure 27.

Students who volunteer for additional experience in athletic training.

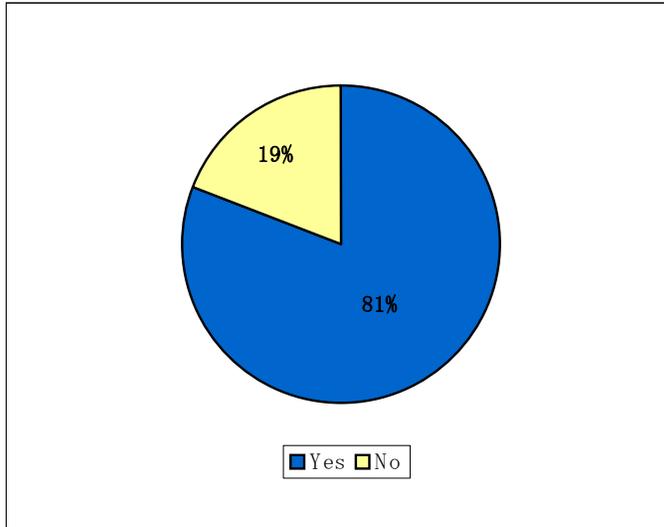


Figure 28.

Students who volunteer for additional experience in athletic training relative to program type.

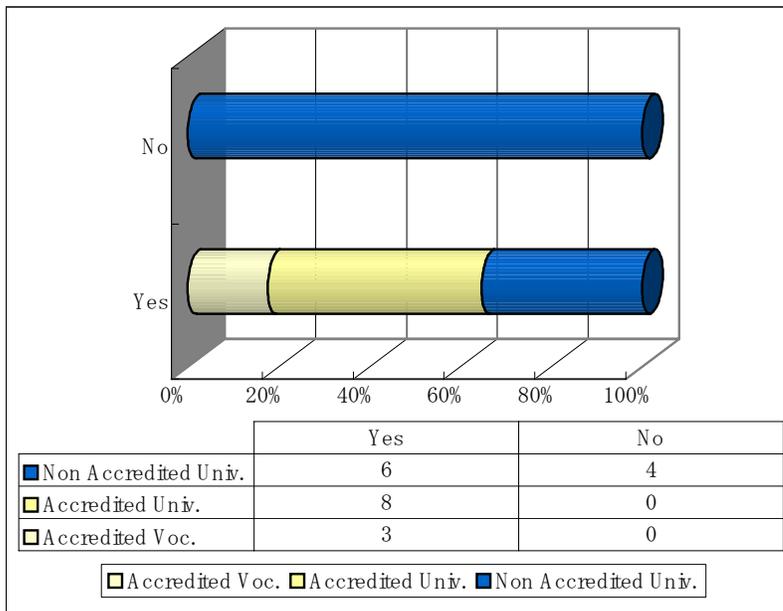


Figure 29.

Overall percentage of students interested in certification.

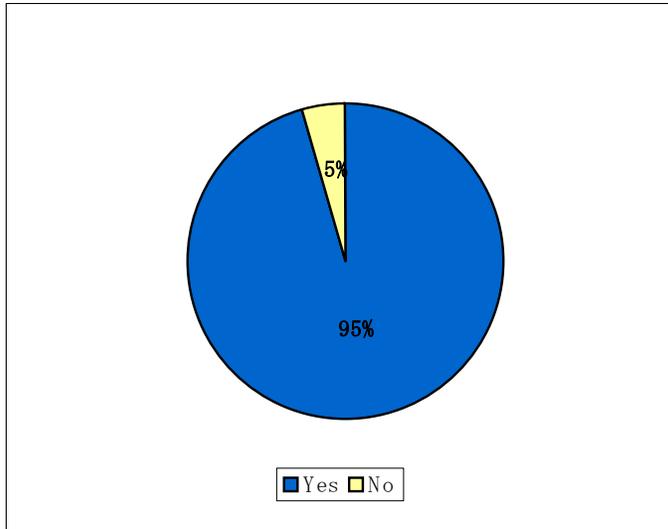


Figure 30.

Percentage of students interested in certification by program type

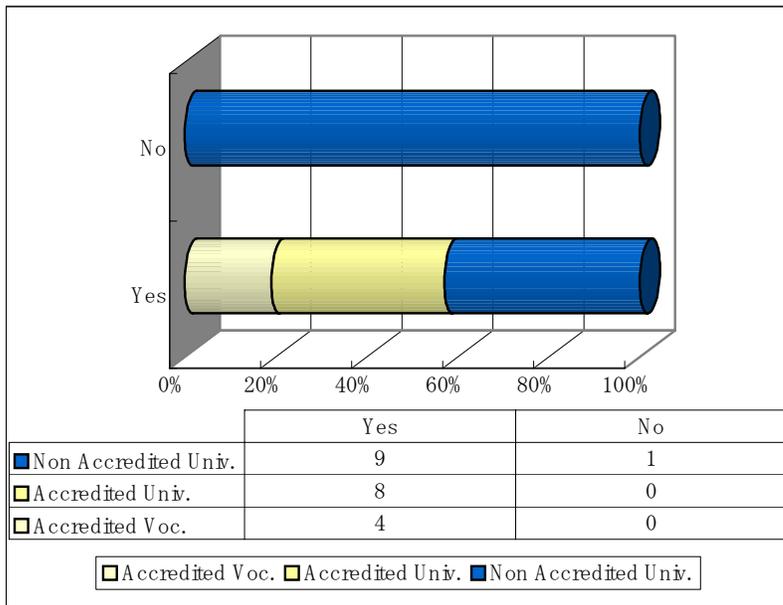


Figure 31.

Certifications students are preparing for overall.

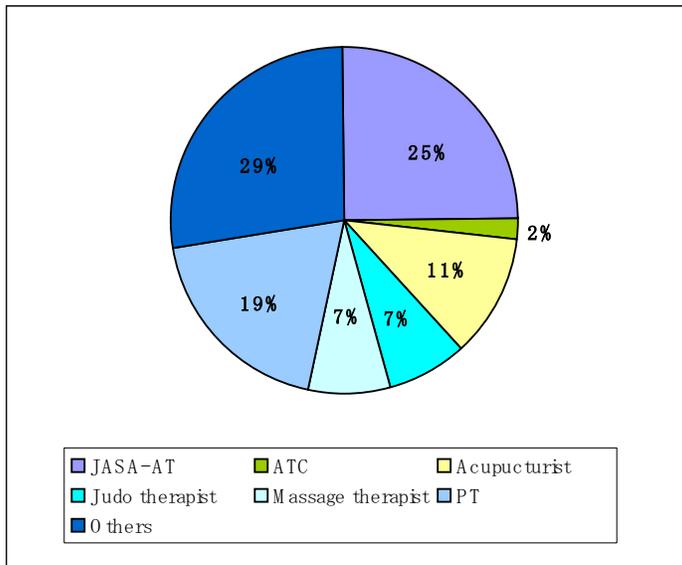


Figure 32.

Certifications students are preparing for by program type.

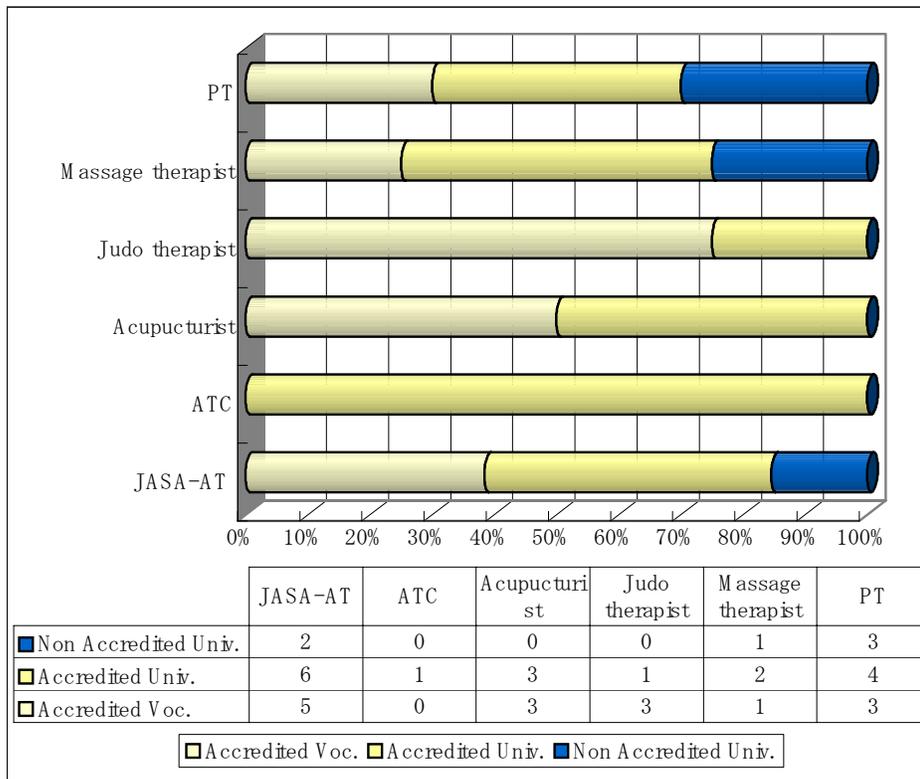


Figure 33.

Professors' opinions as to the possibility of students finding a job in the area of athletic training.

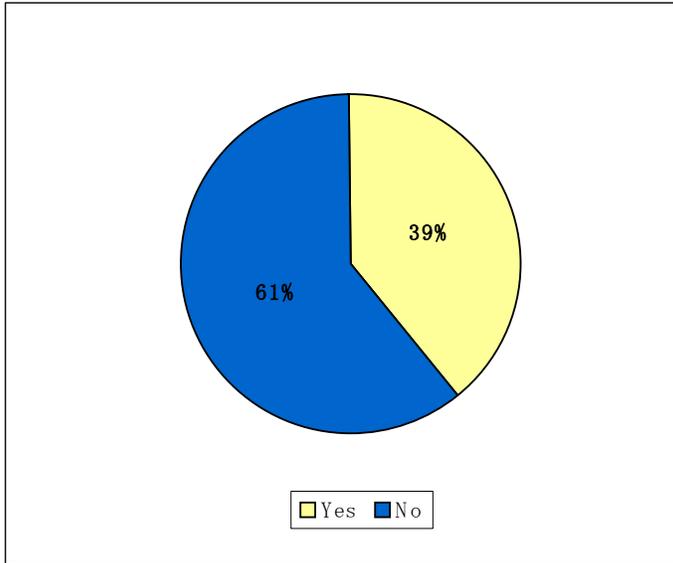


Figure 34.

Professors' opinions as to the possibility of students finding a job in the area of athletic training by program type.

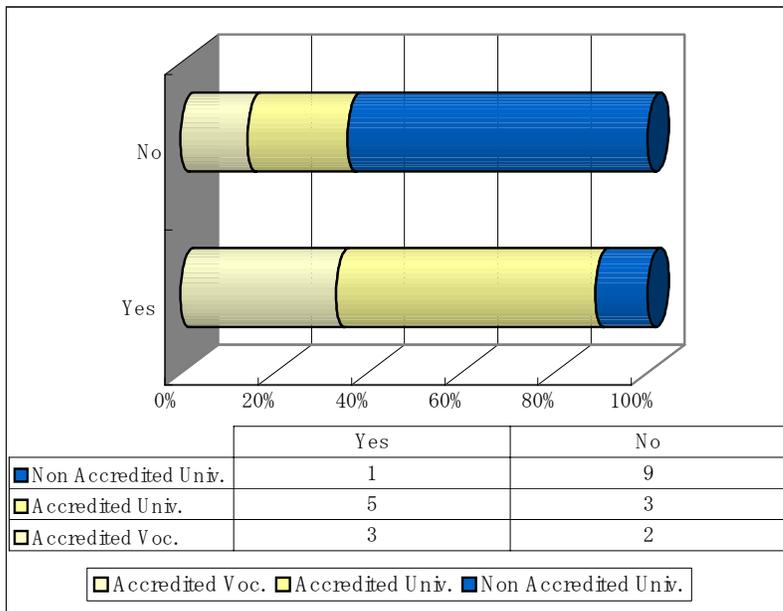


Figure 35.

Professors' opinions on the demand for athletic trainers in Japan

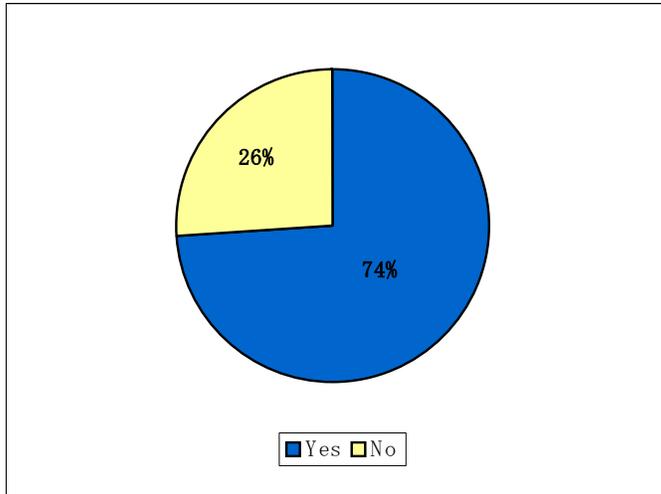
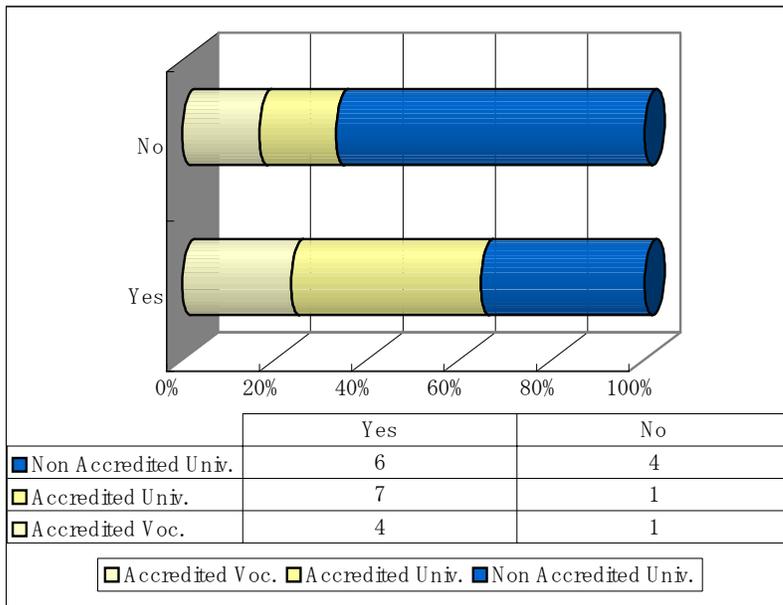


Figure 36.

Professors' opinions on the demand for athletic trainers in Japan by program type.



Appendix B
Cover Letter and Questionnaires

March 2003

Dear Professor,

I am a graduate student at Marshall University to study athletic training and I am working on the thesis, which is “Current Trend in Athletic Training Education and Certification in Japan.” The purpose of this study is to define current athletic training and future demand of athletic training education and certification. For my thesis, I would like to ask you to answer the survey to help me to collect the information of the current athletic training program. This research will be able to clarify the demand and process of athletic training education with collecting the information. All information will be strictly confidential and destroyed when this study is complete. Please direct questions or concerns regarding this project toward my advisor: Dr. Daniel Martin, Associate Professor/ Program Director, Division of Exercise Science, Sport, and Recreation, Marshall University (304) 696-2412 or Martind@marshall.edu You may also email me with questions or concerns.

Please take your time to answer these questions and send me back with attached questionnaire by e-mail. Thank you very much.

Sincerely yours,

Yuriko Ohashi
0326@d2.dion.ne.jp
yurikoohashi@highstream.net

2003年3月

先生 御机下

拝啓

春暖の候、ますます御健勝にてご活躍のこととお慶び申し上げます。さて、突然のお便りを差し上げる失礼をお許してください。私は、大阪体育大学を卒業後、現在アメリカのマーシャル大学（アメリカ）の大学院にて勉強をしている者ですが、ここアメリカと日本における「アスレティックトレーニングの教育と資格の異同について」に関心があり、まず「日本におけるアスレティックトレーニングの教育と資格に関する現状」というテーマについて検討しその現状を把握したく考えております。ご多忙中、誠に失礼かつご無理なお願いにて心苦しいのですが、添付のアンケートにお答え頂ければ大変幸喜に存じます。今後日本でこの方面・分野での研究に少しでも役立てばと考えご無理をお願いしている次第です。よろしくご協力の程お願い申し上げます。なお、ご回答いただきましたすべての情報は秘密裏に管理され、本研究が終了した時点で破棄いたします。また、結果についてお知りになりたい場合は後日報告させていただきます。もし、ご質問などございましたら下記の私宛にご連絡いただきましたら幸喜です。宜しくお願い申し上げます。

敬具

P. S. 1)大橋 由理子
マーシャル大学・運動生理学・スポーツレクリエーション科・大学院生
0326@d2.dion.ne.jp 又は yurikoohashi@highstream.net

2)C/O 指導教官
プログラムディレクター：Daniel Martin 教授
1-304-696-2412 又は Martind@marshall.edu

Survey about athletic training education and certification

Yuriko Ohashi (master's candidate at Marshall University, Huntington, WV, USA)

***Please mark the appropriate response or fill in the blank.**

Program

1. Does your institution have an athletic training (AT) program approved by the Japan Amateur Sports Association (JASA)? Yes No
If "Yes" how many students did you admit to the AT program this year? _____
If "No" are you planning to begin a program? Yes No
2. Would you like to have a graduate AT program? Yes No
3. Do you think your AT education program has progressed? Yes No
4. Do you think AT education is beneficial in Japan's job market? Yes No
5. Are you interested in a cooperative AT program with a U.S. University? Yes No

School education

6. How many core courses does your program require? _____
7. What is (are) the name(s) of the core course(s) in your program?
 Human anatomy Human physiology Psychology Exercise physiology
 Kinesiology/Biomechanics Introduction to Athletic Training
 Evaluation of athletic injuries Evaluation of athletic illness
 First aid and emergency care Personal/ community health
 Therapeutic modalities Therapeutic exercise
 Administration of athletic training programs Nutrition
Other _____
8. How many professors teach in your program? Full-time-male _____ female- _____
Part-time-male _____ female- _____
9. What kinds of certifications do the professors have?
 M.D. Acupuncturist PT Judo therapist Massage therapist JASA-AT
 ATC CSCS PE Teacher's certification Other _____
10. How many courses does each professor teach each term? _____
11. Do you want to increase the number of AT courses in your programs? Yes No
12. If "Yes" what courses do you want to add? _____

Clinical setting

13. Does each student gain experience in a clinical setting as a student athletic trainer? Yes No
- If "Yes," answer the following:
- *What type(s) of clinical setting?
- Professional Industrial and Commercial team College sports High school
 Clinic Little league Others _____
- *Does this count as credit hours as for any other class? Yes No
- If 13 is "No," do you feel the students need this experience? Yes No
14. Does each student have a supervisor to work with? Yes No
- If "Yes," how many supervisors do you have at your school? _____
- If "No," do you feel the students need a supervisor? Yes No
15. Do you teach as well as supervise students? Yes No
16. Do you have a training room or related facility to teach clinical skills? Yes No

Student

17. How would you rate your students learning motivation?
- Excellent Good Fair Poor Very poor
18. Do they volunteer for additional experience as a student athletic trainer in other settings such as teams or clinics? Yes No
19. Do they try to gain certification after they graduate from school? Yes No
- If "Yes," what kind of certification is most common for Japanese AT students?
- JASA Athletic trainer NATA Athletic trainer Acupuncturist Judo therapist
 PT Massage therapist Others _____
20. Do the students gain employment as athletic trainers after graduation? Yes No
21. Do you think the demand of athletic trainers is increasing in Japan? Yes No

Thank you for your cooperation.

アスレティックトレーニング教育と資格に関する調査
大橋 由理子 (Marshall University, Huntington, WV, USA)

* 質問に回答していただくか、最も当てはまるものに印をつけてください。

プログラム

1. 日本体育協会公認のアスレティックトレーニング(AT)のプログラムがありますか? () はい () いいえ
「はい」と答えた方、今年度、何人の学生を AT プログラムの学生として認めましたか? _____人
「いいえ」と答えた方、プログラムを立ち上げる予定ですか? () はい () いいえ
2. 高等教育として、大学院の AT プログラムを作りたいと思いますか? () はい () いいえ
3. AT 教育は、発展してきていると思いますか? () はい () いいえ
4. AT 教育は、将来、日本での仕事に有利だと思いますか? () はい () いいえ
5. アメリカの大学との提携 AT プログラムなどに興味がありますか? () はい () いいえ

教育

6. AT プログラムの、必修専門科目はいくつですか? _____
7. AT プログラムの専門科目は何ですか?すべて選んでください。
() 人体解剖学 () 人体生理学 () 心理学 () 運動生理学 () バイオメカニクス
() アスレティックトレーニング入門 () ズスポーツ外傷・障害の評価 () スポーツ病症の評価
() 応急処置 () 公衆衛生 () 物理療法 () 運動療法 () 栄養学
() アスレティックトレーニング管理
() その他 _____
8. AT プログラムには担当教官が何名ですか? 常勤 男性 _____人 女性 _____人
非常勤 男性 _____人 女性 _____人
9. 担当教官は、どんな資格をお持ちですか?
() 医学博士 () 鍼灸士 () 理学療法士 () 柔道整復士 () マッサージ士
() 日体協トレーナー () ATC (NATA) () CSCS (NSCA) () 保健体育教員免許
その他 _____
10. 担当教官は、それぞれ何個の授業を教えていますか? _____ 個
11. AT の授業をもっと多くしたいですか? () はい () いいえ
11. 「はい」と答えた方、どんな授業を立ち上げたいですか? _____

実習

13. 学生は、学生トレーナーとして経験を積むための現場実習機関がありますか？

() はい () いいえ

「はい」と答えた方、次の質問に教えてください。

*どんな実習機関ですか？

() プロ () 企業チーム () 大学チーム () 高校 () 病院・医療関係 () 少年リーグ
その他_____

*実習は単位として数えられますか？

() はい () いいえ

「いいえ」と答えた方、この経験が必要と思いますか？

() はい () いいえ

14. 学生の実習先には指導教官がいますか？

() はい () いいえ

「はい」と答えた方、あなたの学校には実習指導教官が何人いますか？

_____人

「いいえ」と答えた方、実習指導教官が必要だと思いますか？

() はい () いいえ

15. あなたは、授業と、実習指導と両方を行っていますか？

() はい () いいえ

16. あなたの学校には、実習のための部屋や施設がありますか？

() はい () いいえ

学生

17. 学生の勉学に対するやる気はどうですか？

() 大変良い () 良い () 普通 () 良くない () 大変良くない

18. 学生はトレーナーとしての活動に意欲的で、ボランティアとしてチームやクリニックで働こうとして

いますか？

() はい () いいえ

19. 学生は、卒業後に何か資格をとろうとしますか？

() はい () いいえ

「はい」と答えた方、一般的な資格は何ですか？

() 日体協トレーナー () ATC (NATA) () 鍼灸士 () 柔道整復士 () マッサージ士

() 理学療法士 その他_____

20. 学生は卒業後トレーナーとしての仕事に就けるとおもいますか？

() はい () いいえ

21. 日本でのトレーナーの需要は今後、増えると思いますか？

() はい () いいえ

何かコメントがありましたら、お願いします。

ご協力ありがとうございました。

Appendix C

Pictures

Tokai University

Main training room



KinCom



Modalities and treatment beds

Football training room



Handmade taping table



Individual tapes

Osaka University of Health and Sports Sciences

Taping table



*This room connects to a weight room



Ice machine



Whirlpool

Nagoya Grampus Eight

Modality



Weight check



Thermotherapy



Appendix D
Curriculum Vitae

Yuriko Ohashi, ATC

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(304) 697-2729 (Home)
(304) 696-2329 (Work)
0326@d2.dion.ne.jp

OBJECTIVE: To attain an athletic training internship position to expand my knowledge and experience

EDUCATION:

- 2001-Present **Marshall University** Huntington, WV
Master of Science in Health and Physical Education
Emphasis in Athletic Training Anticipated graduation May 2003
- 2000-2001 **University of Tennessee at Martin** Martin, TN
Post Bachelor of Arts in Health and Human Performance
Emphasis in Athletic Training GPA 3.66/4.0
- 1995-1999 **Osaka University of Health and Sport Sciences** Osaka, Japan
Bachelor of Arts Majoring in Sports Science
Emphasis in Sports Medicine GPA 3.64/4.0 Graduated March 1999

EXPERIENCES:

- 2001-Present **Graduate Assistant Athletic Trainer** **Marshall University**
*Work in conjunction with head athletic trainer in prevention, evaluation, rehabilitation, education, and organization
*Primary Sport Responsibility: Men's Soccer, Men's & Women's Track & Field, Women's Volleyball, and Softball
*Additional Coverage: Football, Men's & Women's Basketball, Women's Tennis
*Assist in the education of student athletic trainers
*Communicate with general and orthopedic physicians on a regular basis
*Responsible for general record keeping
- 2000-2001 **Student Athletic Trainer** **UT Martin**
*Primary Sport Responsibility: Football
*Additional Coverage: Women's Basketball
- 1999-2000 **Associate Athletic Trainer** **Tokyo Japan**
Onward Oaks Industrial & Commercial Football Team
*Assisted head athletic trainer in prevention, rehabilitation, and organization
*Conducted educational sessions for student athletic trainers
- 1999-2000 **Physician Assistant** **Tatsumi Clinic, Japan**
*Assisted Acupuncturist, Massage Therapist and Judo Therapist
*Performed documentation for health insurance
- 1995-1999 **Student Athletic Trainer** **Osaka, Japan**
Osaka University of Health and Sports Sciences Football Team
*Primary SAT 1996-1999
*Responsibility for team management, including travel, budget, and equipment maintenance
*Member of college football association, student organization, and blue line

OTHER EXPERIENCES:

Jan. 2003	Intern: HIT (High Intensity Training) Center	Huntington, WV
Nov. 2002	GSAT: Mid American Conference Volleyball Tournament	Ypsilanti, MI
June 2002	CPR /First Aid Provider: Summer Camp	Huntington, WV
May. 2002 MI	GSAT: Mid American Conference Outdoor Track and Field Championship	Ypsilanti,
Feb. 2002	GSAT: Mid American Conference Indoor Track and Field Championship	Bowling Green, OH
Dec. 1998	SAT: All-Star Game Football	Osaka Japan
May 1997	SAT: Friendly Football Game with Canada Western Ontario University	Osaka Japan

RESEARCH:

Spring 2003	Thesis: "Current Trend in Athletic Training Education and Certification in Japan" Research: "Acupuncture in Fracture Healing"
Spring 1999	Thesis: "The Study of Acute and Chronic Injuries of College Football Players"

AFFILIATION/ CERTIFICATIONS:

2003-Present	NATABOC Certified Athletic Trainer #040302053
2000-Present	CPR/ First Aid Certification
2000-Present	National Athletic Trainers' Association Membership #986302
1999-Present	Health and Physical Education Teaching Certification, Japan
1999-Present	Sports Instructor of the Physically Handicapped Certification, Japan