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Athletic Training Education Reform

October 19, 2020

Master of Science in Allied Health: Healthcare Administration

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Abstract

Athletic Training Education Programs are in the midst of major clinical and educational reforms following the release of the Strategic Alliance Degree Statement under the direction of the Commission on Accreditation of Athletic Training Education (CAATE). Athletic Training has historically been a bachelor's-level entry degree. The new degree standards under CAATE will make the profession a master's-level entry degree. Limited research exists on how the Strategic Alliance Degree Statement and the transition of the degree will affect the profession of Athletic Training in the short or long term due to the limited number of programs who have already completed the transition. In response to this, a 17 question web-based survey was distributed to Athletic Training Program Directors and Clinical Education Coordinators throughout the state of Ohio to assess their individual and institutional responses to the mandatory program transition and reform efforts. Results of the survey reflected the division of perspectives on the benefits and short-comings of such educational reform. A total of twelve institutions throughout the state of Ohio were represented in the responses. Roughly 56% of the respondents thought the transition would overall benefit the profession while the other 43% regarded it as harmful to the profession, partially on the account of so many programs being eliminated due to the combination of financial costs of the transition and low-enrollment rates. Financial cost was a frequently cited concern in the potential success of the transition, with 24% of respondents estimating costs of \$30,000 or more in order to support a transition of bachelor's programs to master's entry-level programs.

Keywords: Athletic Training, Education Reform, Program Directors, Clinical Education Coordinators, Master's Degree, Strategic Alliance Degree Statement

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Statement of the Problem

The National Athletic Trainers Association (NATA) was established in 1950 at the first national meeting of over 200 Athletic Trainers in Kansas City (NATA, 2019). Since that time, the profession has seen changes in licensure, certification, accreditation, and educational standards. The most recent change in educational standards for Athletic Training Education Programs has sparked national debate within the professional and educational Athletic Training community.

Athletic Training Educational Reform

In 2015, the Commission on Accreditation of Athletic Training Education (CAATE) announced the Strategic Alliance Degree Statement in conjunction with the National Athletic Trainers Association (NATA), the Board of Certification (BOC), and the NATA Research & Education Foundation. The Strategic Alliance Degree Statement will establish the professional degree in Athletic Training at the master's level and will cease acceptance to bachelor's programs after the fall of 2022 (CAATE, 2019). Previously, the Athletic Training degree standard had been a bachelor's entry-level program with over 300 accredited educational programs across the United States (CAATE, 2020).

Historical Educational Reform

Formal educational curriculum development for Athletic Training Education Programs first began in 1959 when the first curriculum model was approved by the NATA (Delforge & Behnke, 1999). The Athletic Training academic major was proposed and developed in the 1980s by the NATA Professional Education Committee and in 1990, the American Medical Association (AMA) formally recognized Athletic Training as an allied health profession (Delforge & Behnk, 1999).

The professional transition to a master's-level entry degree for Athletic Training will mark the second major shift in degree type for the profession. Athletic Training Education Programs have historically faced serious reform during the transition of the degree from an internship program to a competency-based accredited bachelor's degree (Craig, 2003; Starkey, 1997; Weidner & Henning, 2002). Many healthcare professionals, including Physical Therapists and Pharmacists, have experienced similar changes in educational standards and accreditation over the past decade (Balogun et al., 2018; Clement, 2005; Furze et al., 2016; Hinman & Brown, 2017; Supapaan et al., 2019). However, the current experiences of educational reform in Athletic Training programs transitioning to the master's-level entry degree has already been experienced by Physical Therapy programs who concluded the master's-level entry degree in favor of the Doctorate of Physical Therapy nearly 20 years ago (Plack, & Wong, 2002).

Future Educational Reform

There are many reasons as to why the National Athletic Trainers Association (NATA) and the Commission on Accreditation of Athletic Training Education (CAATE) proposed the development and implementation of the new master's-level professional degree. Among the proposed benefits of the professional master's-level entry program are a greater impact on salary, diversity, reputation & respect, and reimbursement for services (NATA, 2018). Though these proposed benefits have been investigated by the NATA and CAATE, many of the benefits are supported by theory rather than empirical research. However, there is a large body of research which investigates the differences between currently existing bachelors, masters, and doctorate Athletic Training Education Programs focusing on program characteristics and outcome measures

(Bowman et al., 2019; Bowman, Mazerolle, & Barrett, 2017; Bowman et al., 2015; Ostrowski, & Marshall, 2015).

There are currently over 300 bachelor's level Athletic Training Education Programs across the United States of America currently being overseen by CAATE. A change in degree level and expectations set forth by the NATA and CAATE will affect a vast number of stakeholders, including Program Directors, future & current students, currently practicing Athletic Trainers, and higher education institutions (Mazerolle, Bowman, & Pitney, 2015). The shift in degree level of Athletic Training is mirroring the transitions already experienced by Physician Assistants, Occupational Therapists, Physical Therapists, and Speech & Language Pathologists (Richardson, 2013). Each of these healthcare professions now currently receives their professional education at a minimum of the graduate level, with Physical Therapy now at a doctorate entry-level.

Athletic Training has historically been an exception to the professional trend toward a master's-level minimum expectation. Future and current reforms in Athletic Training education have sought to correct the exception experienced by athletic trainers and to align the profession with the current educational standards for comparable healthcare professionals (Richardson, 2013). Continued investigation and research into the effects of the degree-level change mandate will be necessary to validate and justify the decision. Many colleges and universities have chosen to withdraw offering the Athletic Training major degree rather than invest in transitioning the degree-type to the mandated higher level. Investigations into the perceived and actual cost of the degree transition at higher level these institutions should also be undertaken in order to better understand the impact and influence of the mandate on both higher education institutions and the students enrolled in the programs.

Review of Literature

The purpose of this section is to review the literature associated with current standards for professional Athletic Training Education Programs established under the Commission on Accreditation for Athletic Training Education (CAATE). Athletic Training education is currently facing a critical time of transition previously experienced by many other professional healthcare educational programs. An evaluation of educational standards and research from both within the profession of athletic training and from other healthcare professions will contribute to our understanding of the impact the degree transition will have on the profession of athletic training.

Allied Healthcare Education

Allied healthcare is a diverse and growing field. A recent estimate states that 60% of the United States healthcare workforce could be included among allied healthcare professionals (ASAHP, 2018). Allied healthcare education is overseen by national accrediting bodies which work to establish minimum educational standards for healthcare professionals in order to ensure best educational and clinical practices among higher level institutions. A review of the accrediting bodies and the minimum educational standards will contribute to the understanding of how educational reform can impact the whole of a healthcare profession.

Accrediting Bodies

Each healthcare profession has its own unique accrediting body responsible for setting a minimum standard for the educational expectations of the awarding degree body. Nursing education programs are accredited by the Accreditation Commission for Education in Nursing (ACEN). Physical Therapy programs are accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). Athletic Training

educational programs are accredited by the Commission on Accreditation for Athletic Training Education (CAATE). Physician Assistant educational programs are accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). Pharmacy educational programs are accredited by the Accreditation Council for Pharmacy Education (ACPE). These accrediting bodies are all nationally recognized by the federal level accrediting body for higher education known as the Council on Higher Education Accreditation (CHEA) and the US Department of Education. Accrediting bodies play a critical role in educational advancements and setting degree standards for their respective professions.

Educational Standards

Educational standards must be met by educational programs at higher level institutions in order to maintain nationally recognized program accreditation. Each professional accrediting body, often in conjunction with the profession's national association, influence the evolution and expansion of the profession.

Physical Therapy & Occupational Therapy.

Physical Therapists currently receive their educational credentials with a minimum degree requirement of a doctorate degree in order to practice professionally (Plack & Wong, 2002). The bachelor's and master's PT programs, now both discontinued, were originally established in 1927 and 1942, respectively (Balogun et al., 2018). The entry-level doctorate for all Physical Therapy (DPT) programs was established in 1993 (Balogun et al., 2018). Physical Therapy education programs experienced similar transitions now being faced by Athletic Training education programs across the United States. Similarly, Occupational Therapy now requires an entry-level master's degree in order to be recognized as a practicing allied healthcare

professional, though many graduates still pursue a doctorate of Occupational Therapy (Richardson, 2013).

Pharmacy.

The transition for all pharmacy education programs in the United States to doctorate-level entry programs began in 2000 (Supapaan et al., 2019). Transition to the doctorate degree, commonly known as PharmD, was in an effort to enhance clinical learning and competencies into the degree curriculum, as well as to reflect the growth of the knowledge held by those in the pharmacy profession (Supapaan et al., 2019). Additionally, the transition from the BPharm degree to the PharmD degree level saw the program eligibility require increased years of education to sit for the State Board Examination.

Athletic Training.

Athletic Training education programs are currently undergoing the transition from being a nationally recognized bachelor's level entry degree to a master's level entry degree under CAATE's Standards. Currently, many higher-level education institutions still maintain active bachelor's, post-professional master's, and doctorate Athletic Training degree options. However, by the fall of 2022, bachelor's level programs are mandated to cease acceptance of students into undergraduate degree programs. Post-professional programs will also be discontinued by the start of the 2025-26 academic calendar year. The transition to a master's level-entry program has sparked great debate among professional Athletic Trainers following the release of the 2020 Standards for Accreditation for Professional Athletic Training Programs Crosswalk Statement which outlines new degree requirements for professional accreditation (CAATE, 2018).

Athletic Training Education

The decision to transition the entry-level bachelor's degree to an entry-level master's degree was made under the direction of the National Athletic Trainers Association (NATA), the Board of Certification (BOC), the Commission on Accreditation for Athletic Training Education (CAATE), and the NATA Research & Education Foundation as part of the Strategic Alliance. Currently, CAATE recognizes over 300 bachelor's level Athletic Training Education Programs across the United States and 15 accredited post-professional programs. However, the currently accredited post-professional programs will be discontinued by the start of the 2025-2026 academic calendar year. Historically, the profession has faced several transitions in degree-type and accreditation from curricular inception in 1959 (Delforge & Behnke, 1999). However, Athletic Training education has been behind the trend when compared to its healthcare counterparts in Physical Therapy, Occupational Therapy, and Pharmacy.

Outcome Measures

Debates in the professional Athletic Training community have continued following the announcement of the Strategic Alliance's Degree Plan. Implementation of the plan has split the professional community, and as such, evidence to support or resist the transition has become a hot-topic of research. Since the degree-transition process has only begun to be implemented by some institutions, and no long-established programs exist, much of the current research has been adapted to compare the currently functioning bachelor's programs to the current established model of post-professional Athletic Training master's programs. Many of the studies investigate the benefits or drawbacks of the transition with the focus on educational outcome measures including clinical preparedness measures, job placement measures, program graduation rates, and

program demographics (Bowman et al., 2015; Bowman et al., 2019; Bowman, Mazerolle, & Barrett, 2017).

Clinical preparedness measures.

A study by Bowman, Mazerolle, & Barrett investigated the perceptions associated with professional master's level Athletic Training students during the socialization phase of their transition to professional practice (2017). Through use of an online survey, both current master's level students and program faculty members answered open-ended investigatory questionnaires about perceptions surrounding successful transition to practice for students. The study resulted in the emergence of the primary theme of clinical education as major preparation factor for a successful transition to clinical practice by both students and faculty members (Bowman, Mazerolle, & Barrett, 2017). The authors concluded that clinical education experiences play a critical role in preparing professional master's students to a successful transition to autonomous practice. Appropriate supervision, in combination with clinical practice opportunity, helped students to build confidence in conjunction with clinical mentorship from staff and faculty.

Additionally, a study by Bowman et al. explored the perceptions of preparedness for transition to professional practice in 14 current master's level Athletic Training students from nine different accredited institutions through the use of qualitative interviews (2019). The researchers established three themes following in-depth interview data analysis: (1) students felt prepared for clinical practice through the mentoring networks they developed, (2) through exposure to a range of clinical experience, (3) and through the autonomy allowed during their program education (Bowman et al., 2019).

Job placement & graduation rates.

A study by Bowman et al. investigated the differences in student retention rates and career placement rates of individuals in both bachelor's and master's level Athletic Training Education Programs (2015). The study surveyed program directors (PD) of Athletic Training bachelor's and master's level programs across the United States. PD's reported data on student retention and career placement through a web-based survey, totaling involvement from 192 program directors. Based on the results of the survey data, the researchers concluded that PD's from master's level programs reported higher student-retention rates than their bachelor program counterparts (Bowman et al., 2015).

The study also found that PD's from the master's level programs also reported a higher number of Athletic Training related career-placement rates for their students who graduated. As a result of the reported data, the authors concluded that the findings supported the theory in the athletic training community that an entry-level master's program would be more beneficial for the future successes of the profession of athletic training than their entry-level bachelor counterparts on the basis of higher student retention, graduation, and career-placement rates.

A study by Ostrowski & Marshall investigated the characteristics of master's level-entry Athletic Training programs with data collection focused on cohort characteristics, program graduation requirements, and program outcome measures (2015). Participants included 11 post-professional master's level program directors (PD) who answered a web-based survey composed of 31 questions. The survey questions were divided between six categories: program director demographics, program history, cohort characteristics, program requirements, outcome measures, and program director

opinions (Ostrowski & Marshall, 2015). After analysis of the data, the retention rate of students was found to be 91% from first year to second year in the master's-level degree programs. Additionally, 91% of students graduated from their respective institutions. Of those graduates, 93% pursued employment under the ATC credentialing associated with a professionally practicing Athletic Trainer. Overall, 91.7% of students under a 3-year aggregate passed the BOC on their first attempt. Program director's opinions questions revealed that 91% of directors believe that students who graduated from a master's level program were better prepared for the profession compared to their bachelor degree counterparts (Ostrowski & Marshall, 2015).

The researchers concluded that the high retention rates, high graduation rates, high first-time BOC pass rates, and high employment under an ATC credential of master's-level Athletic Training students which were reported by program directors indicated that a master's-level entry degree may be more successful for future advancement of the Athletic Training profession compared to a bachelor's-level entry degree (Ostrowski & Marshall, 2015).

Gaps in Literature

Despite the depth of investigation to compare current post-professional master's programs characteristics with their bachelor-level counterparts, there are still gaps in research related to how the Strategic Alliance's Statement will affect the future of Athletic Training education. Specifically, there are research gaps related to how the transition will potentially affect salaries and reimbursement rates for Athletic Trainers in the future (NATA, 2018). More research needs to be done to investigate these aspects as well as the prospective cost of conversion of an undergraduate program to a master's level entry degree. This research study will contribute to the literature aimed at

understanding how the transition to a master's level-entry degree will affect current undergraduate Athletic Training Education Programs.

Methodology

Research Design

The research study is descriptive in nature and utilizes a web-based survey. As part of the research, participants completed an online survey administered through Qualtrics. The survey utilizes a mixed-methods approach with a combination of both qualitative and quantitative questions in order to better understand the perspectives in the athletic training community. The mixed-methods survey design was chosen in order to address the complexity and uniqueness of the changing education standards facing the Athletic Training education community at the present time.

Participants

Athletic Training Education Program Directors and Clinical Education Coordinators were selected to receive the web-based survey. The 2020 Athletic Training Education Standards published by CAATE require each program to have both of these two positions within their core faculty. As such, surveying these two roles which are believed to be critical to the success of athletic training education programs made the most sense to receive the survey. Participant's names and contact information were accessed through the publically accessible CAATE.net site for accredited athletic training programs and directly from the school websites (CAATE, 2020). For the initial dispersion of the survey, the 25 professional Athletic Training programs in the state of Ohio were selected through the CAATE.net search for accredited programs. A total of 45 participants were sent the survey for all rounds of data collection. A total of five individuals did not have open-access published email addresses through their respective

program websites. All five belonged to programs which did not have a clinical education coordinator clearly labeled through the CAATE.net site or on their education program pages.

Process

Participants who chose to complete the survey engaged in a series of multiple choice and open-ended response questions (Appendix A). The survey was distributed in three rounds to selected participants through email. Initial dispersal occurred during the first week of June and was sent to all the participants who had open-access published contact email addresses. Second round dispersal was sent two weeks following initial dispersal and was again sent to all selected participants. Third, and final round, of survey dispersal was sent during the last week of July. The survey responses were closed during the first week of August as no new responses were recorded.

Instruments

The survey instrument for the study was developed and administered through the online Qualtrics survey creation tool. The survey consists of 17 questions, seven of which are open-ended questions, with the remaining 10 being drop-down multiple-choice questions. A copy of the survey questions can be found in Appendix A. No already existing or validated survey could be found which was sufficient to measure the perspectives being investigated by the research study. A trial test of the survey was sent to an external CAATE site visitor and researcher who assisted in development of the survey questions. Future validation and refinement of the tool will be achieved through testing by the first dispersion of the survey to the Program Directors and Clinical Education Coordinators of the Ohio-based schools, feedback from question 17 of the survey will help to achieve survey refinement. Future survey dispersal will go to Athletic

Training Education Program Directors and Clinical Education Coordinators throughout the United States pulled from the CAATE.net website in order to gain a more national perspective of the degree transition.

Procedure for Data Collection

The survey instrument will not require any physical contact with the participants as all contact will be initiated electronically through email and the Qualtrics platform. An automated email will be sent to the participants from the Qualtrics site containing the invitation cover letter. The cover letter will conclude with a link to redirect the participants to the Qualtrics site and the informed consent document. At the completion of the informed consent document, participants will be prompted to click the “next” arrow at the bottom of the page to redirect them to the survey questions and indicate their consent to participate. A copy of the survey questions and answer options can be found in Appendix A. Upon completion of the survey, response data will be recorded remotely and stored in Qualtrics under password protection prior to data analysis.

Invitation Cover Letter

Participants will receive the invitation cover letter as an email dispersed through Qualtrics with the survey and informed consent documents linked to it. A copy of the invitation cover letter can be found in the Appendix B. The intent of the invitation letter is to explain the purpose and the importance of the survey to the participants in order to promote engagement.

Informed Consent

Participants will receive the informed consent document as a link following the invitation cover letter email. The link will redirect them to the informed consent form

which requires acknowledgement of consent in order to access the survey. A copy of the informed consent document can be found in Appendix C.

Ethical Considerations

The target participant population is not considered an at-risk population, but there are still ethical complications that should be considered. Many of the Program Directors and Clinical Education Coordinators will be familiar with the research process as part of their educational training. The position of the participants does not diminish the importance of appropriately conveying the informed consent and reception of IRB approval. It is critical to convey the importance to the participants that there is no financial risk or benefit associated with completion of the survey. Additionally, the participants will not be identified by name in the research and their anonymity will be maintained. However, institution names will be recorded as part of the survey in order to track responses, but will not be published as part of the research findings. There were no perceived risks associated with the research study recognized by the Institutional Review Board at Otterbein University. IRB approval through Otterbein University was received prior to the start of data collection and survey dispersal.

Results

The results of the study can be summarized in four categories related to the groupings of the questionnaire. Questions 1-7 of the questionnaire related specifically to the demographics of the participants and their corresponding institutions. Questions 8-10 relate specifically to the CAATE 2020 Standards. Questions 11-12 and 16-17 relate to the personal opinions of the participants regarding the transition of the profession. Questions 13-15 relate specifically to the perceived cost and internal support for the transition of the professional degree.

Demographics

The online survey was completed by 21 total participants, of which 15 identified themselves as Program Directors and 6 identified as Clinical Education Coordinators. The participants represented 12 institutions throughout the state of Ohio. Of the twelve programs, roughly 52% identified as currently being graduate-level entry under the new 2020 CAATE Standards. Additionally, roughly 47% of the programs identified as currently being undergraduate-level entry programs. No programs identified as post-professional entry-level programs. Of the participants surveyed, 60% identified their programs as seeking transition to the masters-level entry degree. Twenty-three percent answered that their respective programs were not transitioning to the master-level entry degree. The remaining percentage were unsure as to the future directions of their institution's programs. The survey was completed by individuals at both private and state-funded institutions within the state of Ohio, of which, 55% identified as being private colleges and universities.

Responses to the 2020 Standards

Survey questions eight, nine, and ten were designed to assess the participants' confidence and knowledge regarding the implementation of the new educational standards proposed by CAATE for the athletic training masters-level entry degree. Question eight focused specifically on how confident the participants were at interpreting the new 2020 Standards on an ordinal scale. Results of question eight showed that out of the thirteen respondents, eight were not totally confident in their ability to interpret the 2020 Standards (Appendix D).

The lack of total confidence was reflected in the open-ended responses submitted for survey questions nine and ten by the participants. A common theme expressed

among participant's answers was that the 2020 Standards were often "vague" which made the Standards difficult to interpret correctly. One respondent reported that "some standards are vague or they are very specific," which supported the confusion being reported by programs on how to most appropriately interpret the new 2020 Standards. Additionally, participants listed a variety of barriers to successful implementation of the new 2020 Standards. Common barriers which were featured were budgetary or financial concerns, appropriate training and education of additional faculty members, and limited time to implement the Standards in the midst of a change in higher education as a result of the COVID-19 pandemic. One respondent stated "appropriate training for faculty and money for equipment" would be the primary barriers experienced by their institution's program. Another respondent addressed the changing landscape of higher education amidst the health crisis by stating "right now money and [the] ability to provide hands on training due to the pandemic and [the] university wanting to do as much remote learning as possible" will be the primary barriers to the degree implementation. Only two of the sixteen respondents, 12.5%, on question nine reported that they perceived no barriers to the implementation of the new 2020 Standards.

Participants were asked in question ten to list the biggest challenges that their institution and faculty had experienced regarding the transition. Themes that emerged from participants responses were a struggle to recruit students to the program, in addition to recruitment of quality preceptors and content area experts to assist in the programs' implementation. Time limits were identified as a problem by several of the respondents, one of which stated "the time necessary to fully map out our framework and connect all the dots" was a major barrier they had run into with implementation of the new 2020 Standards. The shared theme of concern regarding upper administrative,

clinical experience, and educational support was identified among the responses. One respondent stated that “the only problem we have is getting our administration to commit to the transition”, similarly, a second respondent reported a “lack of timely guidance regarding expectations for fulfilling the standards.” Several respondents noted that their administration was hesitant or slow to commit to the transition to the MSAT which contributed to the feelings of lacking financial support and reassurance from their institutions. One respondent addressed the challenges of the cultural shift necessary in order to transition an undergraduate program to a master’s program, stating “changing the expectations of students engaged in clinical education rotations” from historically observational roles to more hands-on roles. Additionally, participants identified the challenge of both development of program assessments that align with the new 2020 Standards and implementation of the assessments in a manageable timeline.

Personal Reflections on the Transition

Questions 11, 12, 16, and 17 asked participants to reflect on their personal and professional opinions on the transition of the profession from an undergraduate-level entry to a masters-level entry degree. When participants were asked what their personal opinion on the degree transition was, responses were heavily split. Roughly half of the respondents thought the transition was a good idea that would overall benefit the profession while the other half regarded it as harmful to the profession on the account of so many programs being eliminated due to the combination of financial costs of the transition and low-enrollment rates. One respondent stated that “many programs in Ohio are closing their doors due to the cost of the master’s degree and low enrollment.” Several respondents reflected that they felt it was necessary in order for the profession of Athletic Training to be recognized more respectfully in the medical field. One

respondent stated “in order for our professional discipline to maintain a presence in the grander medical model we need to make the transition.” However, another respondent stated “I can understand wanting to bring the Athletic Training profession up to other levels in the medical field, but I am not sure that this is the way to do it.” Hesitancy in regards to the timing of the transition was reflected in 5 of the 15 responses, one of which stated “I am not sure this is the right time to make such a big move... until salaries are improved and better recognition...of what the profession of AT is, this move could have waited 3-5 years.”

When participants were asked in question 12 if they thought the transition would benefit the profession overall, many responded that they thought it would in the long-run, but that it wouldn't happen right away. One respondent reported that “while there will be some growing pains and we will lose some programs; it will benefit the profession and our patients in the long run.” A majority of participants said that they thought the transition would better align the profession with peer medical professionals such as physical assistants, and nurse practitioners. A theme of improvement of professional skills and knowledge was reflected among the answers shared by several of the participants. One respondent stated “this change allows us to advance the level of practitioner we are producing.” However, five out of sixteen of the respondents, 31%, felt that the transition would not be beneficial to the profession and that it would not accomplish the goals of reimbursement for services, increased pay for athletic trainers, or alignment of the degree with peer healthcare professionals. A respondent reported “the bigger issue of being recognized by Medicare and Medicaid still remain...until that is solved, we will remain in a standstill...regardless of [the] number of degrees.”

Participants were asked in question 16 if they felt like there were any specific standards that did not align with the profession. Of the twelve respondents, six reported that there were standards which did not align with the profession, five reported that they did not see any conflicts between the 2020 Standards and the profession, and one respondent reported that they were unsure of the alignment since they were not familiar enough with the new standards. The main issue participants identified in alignment between the 2020 Standards and the profession was Standard 6, which states that “the program meets or exceeds a three-year aggregate of 70% first-time pass rate on the BOC examination” (Guide to 2020 Standards, 2018; Net, 2013). Respondents identified that other healthcare professions utilize overall or aggregate pass rates for their profession examinations rather than first-time pass rates being proposed by the 2020 Standards. Four of the twelve respondents, 33%, specifically addressed Standard 6 which requires a 70% first-time pass rate for the Board of Certification examination, and one respondent stated “while I appreciate the intent behind the standard...there is no evidence that a pass rate above 70% equates to better practitioners produced from the program.” A second respondent stated “we are the ONLY healthcare profession which looks at first time pass rate...[and] the current generation of students...really struggle with the 1st time pass.” Other respondents identified the standards which dealt with medical areas not traditionally found within the bounds of the athletic training profession, such as behavioral health interventions, biometrics, and pharmacology stating “administration of medications...is outside our sandbox.”

Question seventeen asked participants if there were any survey questions which were unclear or any additional questions which they believed should be included in future research studies for this topic. Of the total respondents, 90% recommended

demographic clarification for the level of research institution based on the Carnegie Classification rather than by university Division level. Additionally, several participants reported that they did not accurately know the anticipated expenses associated with transitioning or eliminating their institutions' program. Participants reported that expensive to transition to program will only be accurately assessed following the transition which was recommended as an area for future research.

Cost & Support

Three questions in the survey were specifically related to the participants' perception of the cost of transitioning to the MSAT and the associated perception of support for the transition among preceptors and administration. When asked in question 13 if they felt as though they had the administrative support to handle the transition, a majority of participants reported that they felt they had the administrative support, only two out of the seventeen respondents, 12%, felt like they lacked the administrative support, and three participants said that they did not know whether or not they had the administrative support to handle the transition (Appendix E). Question 14 addressed the perceived level of confidence in regard to clinical preceptor education and awareness of the new 2020 Standards. Results for this question revealed that 41% felt that preceptor education and awareness was not a source of confidence for the transition (Appendix F). However, confidence was evenly split as 41% of participants reported that they were confident in preceptor awareness and education under the new 2020 Standards and 18% reported that they were unsure.

Question 15 sought to investigate the perception of cost associated with transition to a master-level entry degree. Cost has been cited as one of the main issues with transitioning among higher-level institutions. Throughout the one-responses to

questions nine, ten, and eleven, participants cited their various concerns with the cost associated with the transition to the master's degree. In response to the biggest challenges of the program transition as part of question ten, one respondent stated that "[we] need supportive equipment for this to the tune on \$500K and that has been put on hold for now." Results of the question revealed that a majority of the participants thought the estimated cost for the transition would be under \$10,000. The remaining six participants believed the cost for transition would be greater than \$10,000 and even as high as being over \$30,000 (Appendix G).

Transition to Future Practice Discussion

The realm of Athletic Training Education is experiencing a monumental shift in educational and clinical expectations under the new CAATE 2020 Standards. The transition to the master's-level entry degree has left professionals and students within the field feeling divided and uncertain. This research was developed to contribute to the understanding of how educational programs and their core faculty are reacting and responding to the mandatory change in Athletic Training education.

How the transition will affect the profession of Athletic Training in the long-run is not completely certain, but similar transitions have been completed successfully by peer medical professions including Pharmacy and Physical Therapy (Balogun et al., 2018; Supapaan et al., 2019). A comparison to other allied healthcare professional degree requirements supports the reasoning of the transition to the master's-level entry degree for Athletic Training as it is one of the last allied healthcare roles to move to a master's degree minimum model. The results of the survey support the belief among core educational faculty that the profession of Athletic Training is behind the times in regard to its degree transition when compared to peer medical professions. However,

many of the faculty reported that the timing and timeframe expectations set forth by CAATE and the BOC for the transition were less than ideal. Additionally, the concern of the financial cost of such a transition was heavily focused on in participants' responses to the survey inquires. The reality of the financial implications of such a transition both from an institution's perspective and from a student's perspective will only be accurately answered in the years to come following more investigative research on the effects of the degree transition. Future researchers will have the ability to look retrospectively at how the transition of the degree type effects the profession of athletic training as a whole and in the long-run. Current research using the post-professional model in comparison to the bachelor's model does support the utilization of the master's degree-type for the higher rates of student retention and career job placement upon graduation (Bowman et al., 2015; Ostrowski & Marshall, 2015).

The results of the survey reflected the division of perspectives held by educational program leaders as to the potential benefits and possible pitfalls of the degree transition. Though the results of the survey are by no means comprehensive, it does serve to add to the understanding of how program leaders are reacting to the changing educational landscape of Athletic Training within the state of Ohio.

Limitations

A limitation of the study was based on a low number of completed responses submitted by the participants. As the survey was sent via email and required access through an attached link, there was potential that not all participants would follow the link to complete the survey. Additionally, some respondents reported that the recruitment email was sorted into spam folders as part of their institutions' settings. Future variations of the research may involve formal interviews to address the issue of

online non-completion. A second limitation of the study its use of a survey tool which has not been previously researched and validated. Geographic variables could affect the trend in responses from first round dispersal to Ohio-based institutions only. The proposed second dispersal phase could help to address the geographic limitation of single-state trends. Finally, timing of the survey's dispersal could be considered a limitation as many higher education faculty members are not contracted during the summer months in which the survey's dispersal took place, which could significantly affect faculty engagement with their institutions' email networks during that time. This survey was distributed during the early stages of the COVID-19 pandemic when higher education institutions and their faculty were working on plans for alternative learning academics, which may have decreased survey participation.

Recommendations for Future Research

Future research should be conducted with completion of follow-up surveys by all professional Athletic Training programs across the United States in order to fully assess the atmosphere in the Athletic Training Education community following the integration of the 2020 Standards. Investigation into the financial cost of transitioning an undergraduate program to a master's-level entry degree program will be integral information for the development and continuation of future Athletic Training Educational programs across the United States. Future variations of this research would benefit from utilization of interviews with Program Directors, Clinical Education Coordinators, students, as well as representatives from the NATA, CAATE, and the BOC.

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Appendix A

Survey

1. What is your role related to the Athletic Training Education Program?
Program Director, Clinical Education Coordinator, Other Core Faculty
2. Please state the name of your institution.
Open-ended response
3. What is the level of your institution?
Division 1, Division 2, Division 3
4. What type of program are you currently?
Undergraduate, Post-Professional, Graduate (under the new 2020 Standards)
5. Are you transitioning to the Master's Degree?
Yes, no, unknown
6. Are you a state-funded institution?
Yes, no
7. What state is your institution located in?
Selection of state from drop-down menu
8. What is your confidence level at interpreting the 2020 Standards? (Zero being no confidence, 5 being totally confident.)
0, 1, 2, 3, 4, 5
9. Do you perceive any barriers to implementing the new 2020 Standards? If yes, list them.
Open-ended response

10. What are the biggest challenges you have had so far regarding the transition?

List them.

Open-ended response

11. What is your personal opinion on the degree transition?

Open-ended response

12. Do you think the transition will benefit the profession? If yes, how so?

Open-ended response

13. Do you think you have the administrative support to handle the transition?

Yes, no, unknown

14. Do you feel confident in preceptor education and awareness of the 2020 Standards?

Yes, no, unknown

15. What are the anticipated expenses needed to transition to the Masters-level entry program?

\$0- 4,999, \$5,000- 9,999, \$10,000- 19,999, \$20,000- 29,999, Over \$30,000

16. Are there any specific standards you do not think align with the profession? If so, list them.

Open-ended response

17. Were there any questions which you felt were unclear? Or any additional questions you think should be included in future surveys?

Open-ended response

Appendix B

Invitation Cover Letter

My name is Caroline Hanson and I am a newly certified Athletic Trainer pursuing my Master's degree at Otterbein University in the Allied Healthcare Administration program. As part of my thesis development, in conjunction with Dr. Joan Rocks PhD, ATC, LAT, I am investigating the atmosphere in the Athletic Training community surrounding the transition of the profession to a Masters-level entry degree. My intention is to survey Program Directors and Clinical Education Coordinators to gain a variety of perspectives held by administrators on the educational side of the profession. The climate in Athletic Training education has been changing over the past decade. The aim of the study is to understand how the 2020 Standard changes are affecting Athletic Training Education Programs across the United States. The goal is to access and comprehend the 2020 Program Standards proposed by CAATE on the application level experienced by individuals who have been tasked with implementation of the new standards at the collegiate level.

We have developed a series of questions to probe the climate among educators regarding the change in the profession and to help to identify potential areas of confusion within the new 2020 Standards. The survey will only take 10-15 minutes of your time. The survey is completely voluntary, and you may choose not to participate as well as not to complete the survey at any time with no penalty to you.

I thank you in advance for providing your insights and expertise on this important topic. A summary of the results of the survey may be requested upon its completion. The study has been approved by an Institutional Review Board at Otterbein University. Below is a link which will redirect you to the survey and informed consent document.

Appendix C

Informed Consent

The Department of Health and Sport Sciences at Otterbein University supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We have developed a series of questions to probe the climate among educators regarding the change in the profession and to help to identify potential areas of confusion within the new 2020 Standards. You will be participating in a survey with a series of multiple choice, dropdown, and short answer questions. The survey will only take 10-15 minutes of your time. Although participation will not directly benefit you, we believe that the information will be useful in evaluating the atmosphere surrounding the Master's degree transition in Athletic Training. The study has been evaluated and approved by the IRB committee at Otterbein University and has been deemed to pose minimal risk to participants. We assure you that your name and contact information will not be associated in any way with the research findings.

Your participation is solicited although strictly voluntary. If you would like additional information concerning this study before or after it is complete, please feel free to contact me by phone or mail.

Sincerely,

Joan Rocks, PhD, ATC, LAT, Principal Investigator

Caroline Hanson, ATC, Secondary Investigator

Otterbein University

Westerville, Ohio 43081

(614) 823-3505

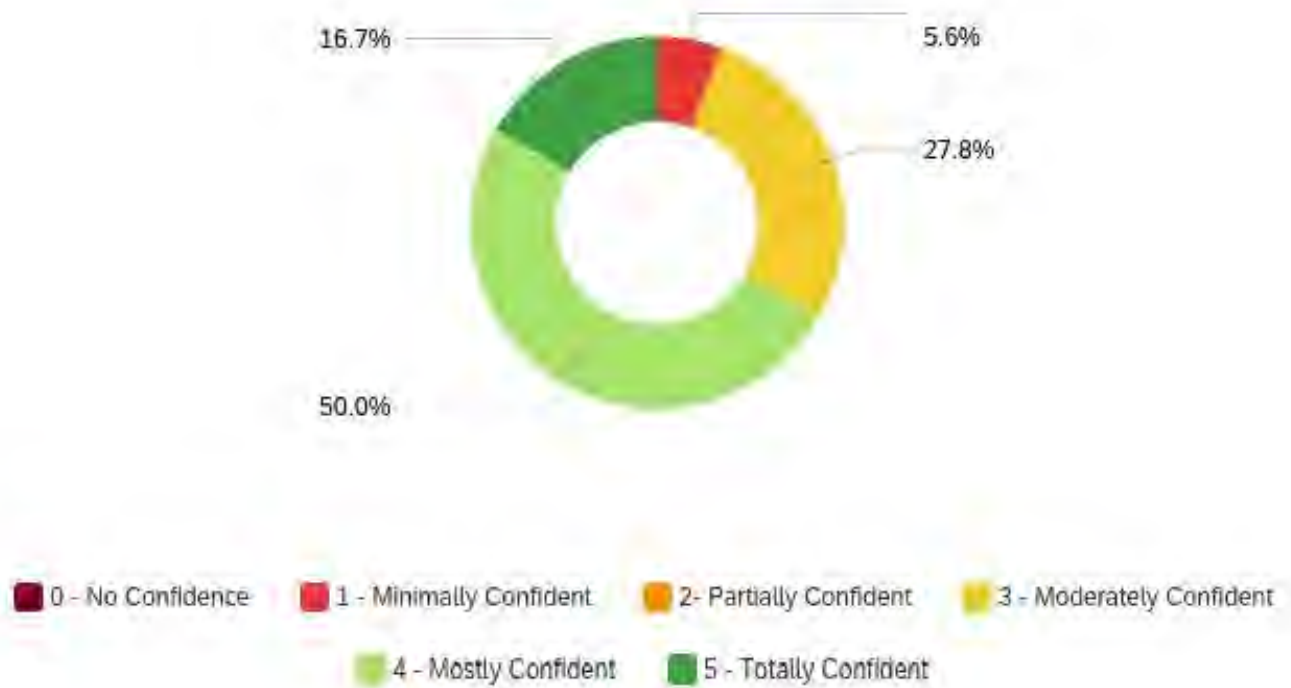
jrocks@otterbein.edu

By clicking on the NEXT button below, I consent to be in this study and affirm that I am at least 18 years of age.

Appendix D

Question 8 Visualization

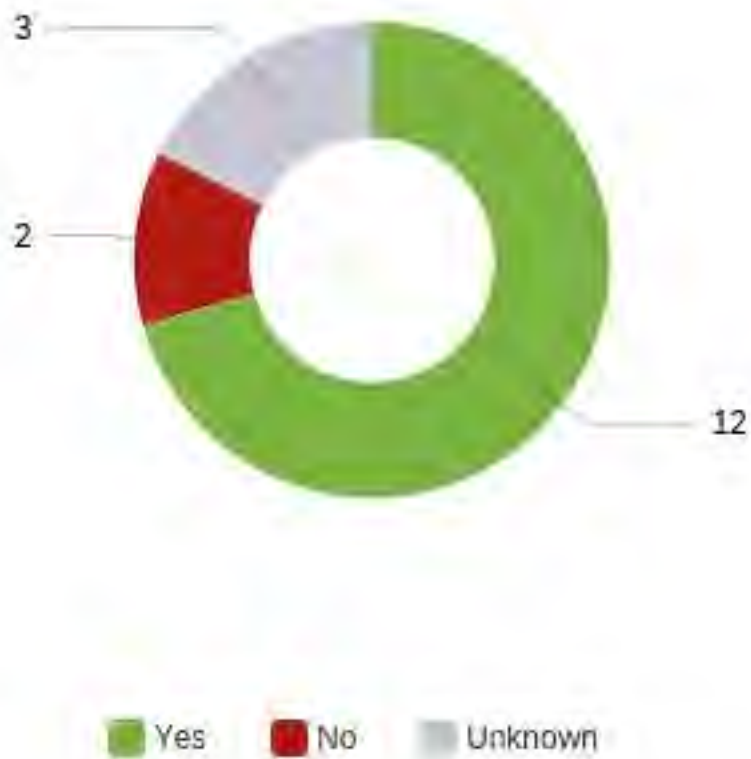
What is your confidence level at interpreting the 2020 Standards?



Appendix E

Question 13 Visualization

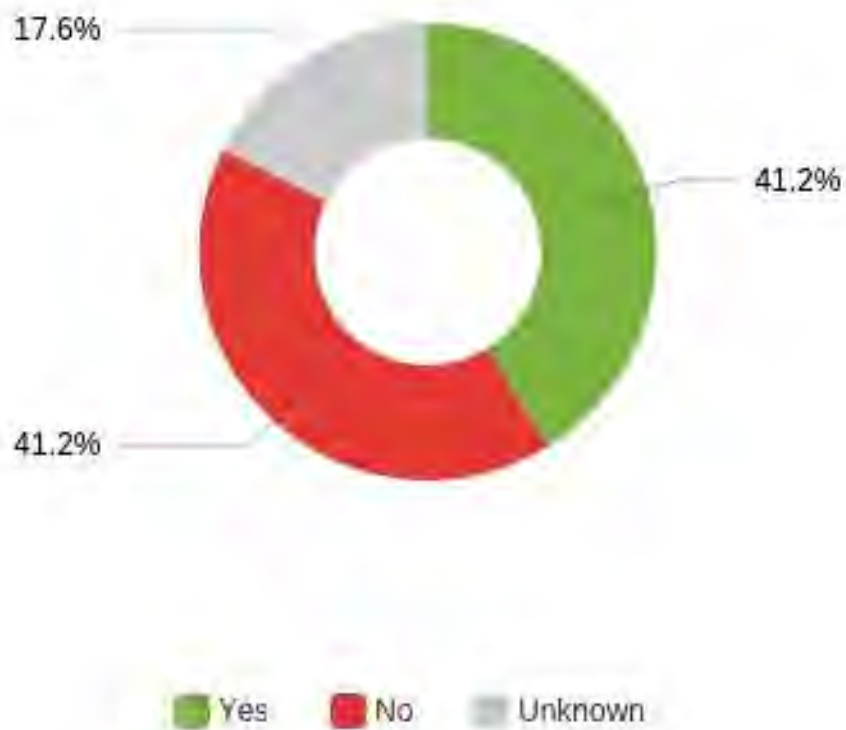
Do you feel like you have the administrative support to handle the transition?



Appendix F

Question 14 Visualization

Do you feel confident in preceptor education and awareness of the 2020 Standards?



Appendix G

Question 15 Visualization

What are the anticipated expenses needed to transition to the Masters-level entry program?

