

DETTL-RIVERA, MARTHA GRACE, Ed.D. Promotion of Mental Health Referral Efficacy in College Athletic Trainers. (2019)
Directed by Dr. Diane L. Gill. 64 pp.

College student-athletes are an at-risk population for negative mental health. Numerous factors are associated with an increased susceptibility to mental health issues, including academics and athletics (Breslin, Shannon, Haughey, Donnelly, & Leavey, 2017; Neal, 2012; Rice et al., 2016; Yang et al., 2007). To address the numerous mental health issues experienced by college student-athletes, the National Collegiate Athletics Association (NCAA), with the help of field experts in mental health and student wellness, developed a mental health guide to implement within athletics departments (National Collegiate Athletic Association, 2016). The document, *Inter-Association Consensus Document: Best Practices for Understanding and Supporting Student-Athlete Mental Wellness*, promotes training for those athletics department personnel who have direct interaction with college student-athletes. Among these, athletic trainers play a pivotal role in preventing injuries, overseeing rehabilitations, and promoting the overall well-being of college student-athletes, including both physical and mental health well-beings. Athletic trainers are in an ideal position to recognize and to refer student-athletes to advanced care for mental health issues, but lack the formal training to confidently perform these skills (Cormier & Zizzi, 2015; Kamphoff et al., 2010; Vaughan, King, & Cottrell, 2004). Additionally, there is limited research available studying athletic trainers' confidence during the referral process, both non-crisis and crisis situations. Therefore, the purpose of this study was to evaluate the referral knowledge and self-efficacy of college athletic trainers before and after completing the USA Mental Health First Aid (MHFA-USA)

course, which has improved confidence levels in other populations (Massey, Brooks, & Burrow, 2014; Moffitt, Bostock, & Cave, 2014; O'Reilly, Bell, Kelly, & Chen, 2011). College athletic trainers ($n = 8$) participated in the MHFA-USA course and completed pre-, post- and one-month follow-up surveys as well as focus group interviews assessing mental health referral knowledge and self-efficacy levels. Results showed significant efficacy improvements from pre- to post-course, and participants maintained those improved confidence levels at one-month follow-up. Furthermore, the athletic trainers consistently stated the course was helpful and useful in intervening during mental health situations. Additional research with larger samples may provide greater insight of athletic trainers' confidence levels with referrals of college student-athletes for mental health issues with the help of the MHFA-USA course.

PROMOTION OF MENTAL HEALTH REFERRAL
EFFICACY IN COLLEGE
ATHLETIC TRAINERS

by

Martha Grace Dettl-Rivera

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

Greensboro
2019

Approved by

Committee Chair

© 2019 Martha Grace Dettl-Rivera

APPROVAL PAGE

This dissertation written by MARTHA GRACE DETTL-RIVERA has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Committee Chair _____

Committee Member _____

Committee Member _____

Date of Acceptance by Committee

Date of Final Oral Examination

TABLE OF CONTENTS

	Page
LIST OF TABLES	v
CHAPTER	
I. PROJECT OVERVIEW	1
Background and Rationale	2
Purpose and Aims	7
Methods.....	8
Results.....	12
Discussion.....	18
II. DISSEMINATION	21
Presentation.....	21
III. ACTION PLAN	28
REFERENCES	31
APPENDIX A. MENTAL HEALTH FIRST AID COURSE OUTLINE.....	36
APPENDIX B. EMAIL RECRUITMENT/IN-PERSON RECRUITMENT SCRIPT.....	38
APPENDIX C. INFORMED CONSENT.....	40
APPENDIX D. PATIENT DEMOGRAPHICS.....	43
APPENDIX E. MENTAL HEALTH EFFICACY QUESTIONNAIRE	45
APPENDIX F. MENTAL HEALTH REFERRAL KNOWLEDGE QUESTIONNAIRE.....	46
APPENDIX G. MENTAL HEALTH COURSE EFFECTIVENESS QUESTIONNAIRE	47
APPENDIX H. MENTAL HEALTH COURSE EVALUATION FORM.....	50
APPENDIX I. FOCUS GROUP INTERVIEW GUIDE	55

APPENDIX J. MCE PRE-/POST-/F/U COMPARISONS	56
APPENDIX K. DISSEMINATION PRESENTATION	57

LIST OF TABLES

	Page
Table 1. MHEQ Pre-/Post-/Follow-Up Comparisons.....	13
Table 2. MCE Form (Self-Efficacy Questions) Pre-/Post-/Follow-Up Comparisons	14
Table 3. MHFA-USA Course Evaluation-Confidence Levels	14
Table 4. MHFA-USA Evaluation-Overall.....	15

CHAPTER I

PROJECT OVERVIEW

Mental health illnesses affect over 43 million adults' lives; more than 19 million consist of college-aged adults between 18-25 years old affected by one or more mental health illnesses (Van Raalte, Cornelius, Andrews, Diehl, & Brewer, 2015). Within the 19 million college-aged adults affected, college student-athletes (SAs) are susceptible to experiencing a myriad of signs and symptoms of mental health illnesses. This population is a unique population because they experience different pressures compared to the general college student population.

Working directly with college SAs, athletic trainers (ATs) play a pivotal role in working with this population to maintain an overall healthy well-being, physically and mentally. When a college SA experiences a physical injury that prevents him or her from participating in their sport for more than a day, there is an increased chance of developing signs and symptoms of a mental health illness (Cormier & Zizzi, 2015). However, ATs do not have formal training in the background of mental health care and treatment, only to recognize early warning signs and who to refer for advanced care (*Athletic Training Education Competencies*, n.d.; Kamphoff et al., 2010; Stiller-Ostrowski & Hamson-Utley, 2010). There is limited research on ATs' self-efficacy levels with mental health referrals of student-athletes. Self-efficacy, which refers to one's personal belief that he or

she will be able to successfully implement certain skills and behaviors, is a key construction learning new skills (Bandura, 1977). An AT's self-efficacy in mental health referrals can determine his or her perceived mastery of the certain skills. The higher the self-efficacy level, the more likely the AT engages in effective and successful behaviors because he or she feels confident with referrals in a mental health situation.

The National Collegiate Athletic Association (NCAA) has provided college athletic departments, including ATs, with an outline to develop a Mental Health Policy (National Collegiate Athletic Association, 2016) that suggests one training for staff: Question, Persuade, Refer (QPR) Gatekeeper Training. The training focuses mainly on intervention skills during distress if a person experiences suicidal ideation or self-harm (*QPR Online Gatekeeper Training*, 2018). Yet, there is a higher incidence of other mental health issues, such as depression and anxiety, experienced by college-aged adults (Auerbach et al., 2016). ATs need effective training to improve their confidence to recognize the early warning signs of mental health illnesses and to refer the college SA to appropriate mental health care.

Background and Rationale

College life for a SA brings new stressors due to the diminished parental support and the commitment associated with intense and competitive collegiate athletics. SAs are responsible for managing and balancing full schedules, including but not limited to: practices; contests; treatments or rehabilitation in the athletic training room; traveling; classes; and studying. These commitments leave little to no personal time for the student-athlete (Breslin et al., 2017; Neal, 2010; Rice et al., 2016). Additionally, the pressure to

win competitions, to appease families, fans, and coaches, and the expectation of a post-college professional career adds additional stress to student-athlete lives (Yang et al., 2007). Lastly, SAs engage in risky behaviors such as drinking, drugs, sexual practices, or involvement in physical fights as coping mechanisms to stressors faced as a college SA (Neal, 2010, 2012). Some individuals use more positive approaches such as exercise to manage life's stressors and deal with mental health issues. Research has revealed overtraining, injury, and burnout in competitive sports lead to mental health issues (Breslin et al., 2017; Rice et al., 2016). Numerous factors lead a SA to develop mental health issues that may lead to an illness, especially if the SA does not seek help from an appropriate medical provider.

Mental Health Stigma

There are a multitude of reasons that diminish the likelihood of seeking help for a mental health issue in the general population, and in SAs. Specifically, a SA may not like to admit having mental health problems out of fear, shame, or inadequacy (Hardeman, 2017). There is a fear of being labeled or seen as “mentally ill or crazy” if discovered seeking help for a mental health illness. Society's view of sports culture celebrates SA's mental toughness. SAs are viewed to be “mentally tough” and not show signs of weakness due to society's stigma regarding mental health. Other reasons SAs fail to seek help from a mental health professional are uncertainty or lack of trust of mental health professionals, limited awareness of the significance of a mental health illness, and practical barriers such as unavailability or inability to pay for treatments (Breslin et al.,

2017; Hardeman, 2017; Watson, 2005). Left untreated, mental health illnesses have potential negative effects on the SAs' academic and athletic success.

Mental Health Best Practices

In 2013, the NCAA established a multidisciplinary task force to address a myriad of mental health issues that face NCAA SAs. Many experts in the field of mental health and overall SA well-being helped contribute to the book, *Mind, Body and Sport: Understanding and Support Student-Athlete Mental Wellness*. After the publication, a core group drafted a supporting document: *Inter-Association Consensus Document: Best Practices for Understanding and Supporting Student-Athlete Mental Wellness*, which is based on the book and includes input from key medical and mental health organizations. This document also includes mental health best practices, which provides sports medicine and athletics departments with recommendations to support and to promote SA mental health well-being (National Collegiate Athletic Association, 2016).

Athletic Department Personnel. The NCAA Mental Health Best Practices (2016) document provides examples of emergent situations that may arise in college athletics departments, including suicide or homicide ideation, sexual assault victims, acute psychosis or paranoia, delirium states, and acute intoxication or drug overdose (National Collegiate Athletic Association, 2016). The athletics environment can support and promote positive mental health well-being for all SAs by supporting inclusion and promoting an environment rich in experiences that foster personal growth, self-acceptance, autonomy, and positive relations with others. Additionally, ATs play a pivotal role in promoting the overall well-being of the SAs, including mental health

wellness (Neal et al., 2013). However, ATs have limited experience using the necessary tools or resources to promote mental health wellness.

Athletic Trainers. Athletic trainers learn a variety of psychosocial intervention strategies such as goal setting, motivation, imagery, and relaxation during their educational training (*National Athletic Trainers' Association 5th Edition*, 2011; Stiller-Ostrowski & Hamson-Utley, 2010). Within the Commission on Accreditation of Athletic Training Education (CAATE) educational competencies, the Psychosocial Strategies and Referral domain states that ATs will have “the ability to intervene and refer these individuals as necessary” (“National Athletic Trainers' Association 5th Edition,” 2011, pg. 27). However, the competencies do not include strategies to help them effectively assist SAs with the navigation of crisis and non-crisis mental health challenges. For example, ATs are not required (per the NATA Competencies) to learn strategies to mediate with someone in both a crisis or non-crisis situation and they do not have the training or competencies to do so. If an AT suspects a SA has an eating disorder, he or she should be able to recognize the symptoms and to refer the SA to advanced care, but not attempt to counsel the student-athlete due to working outside of their scope of practice. Consequently, ATs lack formal clinical training directly related to mental health S/S and do not feel confident with their skills identifying and referring SAs with a mental illness to further advanced care (Clement, Granquist, & Arvinen-Barrow, 2013; Moulton, Molstad, & Turner, 1997; Vaughan et al., 2004). There is a need for more effective mental health training that better prepares ATs to recognize symptoms in SAs so that they

can approach the SA and make the appropriate referrals to mental health professionals (Cormier & Zizzi, 2015).

Mental Health Training Resources

The NCAA has provided ATs with a resource called Question, Persuade, Refer (QPR) Gatekeeper Training. This course's components include how to question, to persuade, and to refer someone who may be suicidal, displaying warning signs of suicide, and how to get help for someone in a crisis (National Collegiate Athletic Association, 2016; *QPR Online Gatekeeper Training*, 2018). A 2015 study showed that the suicide rate in college SAs was lower than that of the general student population of similar age (Rao, Asif, Drezner, Toresdahl, & Harmon, 2015). Despite the lower incidence of suicide, SAs likely have comparable other mental health illnesses such as anxiety and depression (Neal et al., 2013), and ATs need additional training and/or resources to support SAs' overall mental well-being.

The USA Mental Health First Aid (MHFA-USA) course has been designed to improve recognition of the early signs of mental health issues, to increase confidence in helping someone in distress, and to identify appropriate professionals to help with a mental health illness (*USA Mental Health First Aid: Research & evidence based*, 2018) (See Appendix A for course agenda). The MHFA-USA focuses on participants' pre-intervention techniques and responsive skills in a mental health crisis. Emphasizing five topics, depression, anxiety, psychosis, suicide and/or non-suicidal self-injury, and substance use disorder, the MHFA-USA course teaches individuals what to recognize, what to say if warning signs are present, and how to mediate when there is a mental

health crisis or non-emergency through using a specific action plan. This action plan, ALGEE, is an acronym for: 1. Assess for risk of suicide or self-harm; 2. Listen non-judgmentally; 3. Give reassurance and information; 4. Encourage appropriate professional help; 5. Encourage self-help and other support strategies. This course is different from other mental health trainings because of the emphasis on early intervention and recognition. Additionally, the MHFA-USA course teaches participants to apply the action plan ALGEE to various scenarios, practicing multiple simulations to prepare the individuals to translate knowledge into practice. Lastly, the course has shown significant changes in self-efficacy and referral knowledge within various populations.

The MHFA-USA course has effectively improved referral knowledge and confidence levels in other populations such as student affairs staff at a university (Massey et al., 2014), fire service (Moffitt et al., 2014), and pharmacy students (O'Reilly et al., 2011). The course effectiveness has not been evaluated in the AT population. Implementing this first aid course could better improve ATs' confidence in referring college SAs with mental health issues to appropriate medical care, thus promoting mental health awareness and improving SA mental well-being.

Purpose and Aims

Athletic trainers are in an ideal position to assist college SAs in seeking care for mental health illnesses but lack formal training. The MHFA-USA course improves participants' confidence in recognizing signs and referring those with mental health issues. The purpose of this study was to evaluate the influence of the USA Mental Health First Aid Course on college ATs' confidence in their referral knowledge and skills for

individuals experiencing mental health issues. This was accomplished through the following specific aims:

Aim #1: Determine the effect the MHFA-USA course has on college ATs' mental health referral knowledge and self-efficacy.

Aim #2: Assess MHFA-USA course based on participant feedback.

Participants were expected to improve self-efficacy for mental health referrals immediately following completion of the MHFA-USA course and one-month follow-up. Additionally, participant feedback was collected to provide further insights into the practicality of the Mental Health First Aid-USA course in the college AT setting.

Methods

Following IRB approval, certified ATs enrolled in a MHFA-USA course were recruited to complete pre-course, post-course, and follow-up surveys and post-course focus group interviews assessing the knowledge and confidence in referring student-athletes mental health issues. A minor adjustment to the MHFA-USA course was changing each scenario's generic person to a "student-athlete." For example, instead of "Suzy, a friend of your parents," the scenario would read "Suzy, a student-athlete on your colleague's team." This adjustment allowed the MHFA-USA instructor to maintain fidelity to the course curriculum while relating the scenarios to possible real-life scenarios for the participants.

Participants

Participants in the study were recruited via email (See Appendix B) from enrollment lists of MHFA-USA courses within the southeastern United States area, and

prior to the start of the MHFA-USA course. The participants were local ATs who were invited to participate in the course. To encourage participation in the research, participants were entered in a drawing for gift cards. All participants enrolled in the courses ($n = 8$) were required to complete the course itself; however, participation in the research was voluntary and all 8 agreed to participate. The ATs came from two universities and did not interact within the same course; each university's ATs were trained in MHFA-USA on separate days. Participants were required to have current licensure or certification within their state and in good standing with the Board of Certification. Additionally, participants at the time of the study were working with an NCAA sanctioned sport as a certified AT. Participants were provided with the informed consent prior to the study. Five ATs worked at a Division I university located in South Carolina and three ATs worked at a Division III university located in North Carolina. The average age of the participants was 26.9 ($SD = 4.29$).

Measures

Demographics, self-efficacy, and referral knowledge levels were assessed with surveys administered using pre-labeled questionnaire packets pre-course and post-course, while Qualtrics® link was emailed to participants for the one-month follow-up. The demographics included age, gender and athletic training background (years working, current position/title, academic degrees, current state licenses/certifications, sports teams, and the NCAA divisional level).

Mental Health Efficacy Questionnaire (MHEQ). Athletic trainers completed the MHEQ developed by Van Raalte et al. (2015) before and after completion of the

MHFA-USA course to measure confidence level with mental health referral. The eight-item evaluation form measured confidence levels in different scenarios: referring to professionals (“How confident are you that you can refer a friend who has a mental health problem?”) and mental health resources (“How confident are you that you can find resources related to mental health problems?”). Athletic trainers used a 10-point scale (1: Not confident at all; 10: Very confident) to rate statements. The MHEQ has been used to evaluate and to validate an online mental health tool, SupportforSport.org (Van Raalte et al., 2015) (See Appendix D).

Referral Knowledge Questionnaire (RKQ). Athletic trainers completed the RKQ developed by Van Raalte et al. (2015) before and after completion of the MHFA-USA course to measure referral knowledge best practices. The 10-item evaluation form measured referral knowledge levels in mental health: (“Making a mental health referral for a SA can be difficult or awkward even if you know the correct steps to take”; “Talking to SAs about their mental health usually makes things worse.”). ~~Athletic trainers~~ ATs used a true-false scale to rate each statement. The scale was scored by total number correct. The RKQ has been used to evaluate and to validate an online mental health tool, SupportforSport.org (Van Raalte et al., 2015) (See Appendix E).

MHFA-USA Course Effectiveness (MCE) Form. The MCE includes items that evaluate different aspects of the course related to the Theory of Planned Behavior that has previously been used in MHFA-USA trainees (Anthony, Bahn, Goldman, & Yoon, 2015). Specifically, the form includes sections for: behavioral intentions (2 items), attitudes (4 items in 2 sections), social beliefs (6 items in 2 sections), self-efficacy (2

items), knowledge and skills (7 items), cues to action (5 items), and behavior (several Yes/No items in Reaching out and Referral sections). ATs used a 5-point scale (1: Not likely; 5: Extremely likely or 1: Do not agree at all; 5: Strongly agree) to rate statements within each category other than behavior (See Appendix F).

MHFA-USA Course Evaluation. The MHFA-USA Course Evaluation form includes evaluation items in several sections: overall course (4 items), presenter (4 items), practical application (9 items). ATs used a 5-point scale (1: Strongly Disagree or 5: Strongly Agree) to evaluate these sections. Three other items have multiple response options: overall response, strengths and weaknesses. Additionally, the form has open-ended questions: “Was there any issue or topic you expected this course to cover that it did not address” and “Would you recommend this course to others? If no, why not?”. (See Appendix G)

Focus Group Interviews. Athletic trainers participated in focus group interviews following course completion. The five main questions asked participants about their perceptions of the course, its appropriateness for ATs, and suggestions for improvement. The questions included: “What are your overall impressions of MHFA-USA?” and “How appropriate/applicable do you think this MHFA-USA is for NCAA athletic trainers?”. (See Appendix H).

Procedures

The MHFA-USA course was held at a U.S. southeastern public university where pre-course and post-course surveys were completed. Self-efficacy levels and referral knowledge levels were assessed before, immediate post-course, and one-month post-

course using the Mental Health Self-Efficacy Questionnaire, Referral Knowledge Questionnaire, and the standard MHFA-USA Course Effectiveness Form. The MHFA-USA Course Effectiveness Form (except for referral section) and MHFA-USA Course Evaluation were completed at post course. Following completion of MHFA-USA course and post-course survey, participants partook in focus group interviews. There were two focus groups with five participants in group A and three participants in group B that lasted no more than 20 minutes. The focus group feedback was recorded using a Sony ICDUX560BLK Digital Voice Recorder with a built-in USB drive. The audio files were uploaded to a Surface Pro 3, transcribed by the research assistant onto a Microsoft Word Document and stored within the research university's secured online platform, Box.

Data Analyses. Descriptive analyses were used with the ratings on the MHFA-USA Course Evaluation items. To determine changes in self-efficacy, repeated measures ANOVA was used to compare pre-, post-, and follow-up scores from the MHEQ, RKQ, and the questions evaluating self-efficacy within the MCE form. Descriptive analyses were used to summarize responses on the pre-course MCE form (behavioral intentions, attitudes, and social beliefs). Focus group interview transcriptions were reviewed several times, key terms were identified, and similar responses were grouped together.

Results

Self-Efficacy

The MHEQ displayed an overall significant improvement of self-efficacy from pre-course to post-course. The participants' scores went from "Moderately confident" to "Very confident." Additionally, all but one individual item significantly improved as

well. The one item, “Refer a student-athlete to a professional for help with a mental health problem” improved slightly post-course (See Table 1). There were no significant changes from post-course to follow-up surveys; confidence levels remained higher than at pre-course at one-month follow-up. The effect size ($\eta^2 = 0.406$) is large for the small sample size.

Table 1. MHEQ Pre-/Post-/Follow-Up Comparisons.

<u>“How confident are you that you can...</u>	<u>Pre M ± SD</u>	<u>Post M ± SD</u>	<u>F/U M ± SD</u>	<u>F</u>	<u>p</u>	<u>η^2</u>
Find resources related to mental health problems?”	6.75 ± 1.58 ^a	9.00 ± 1.20 ^b	9.26 ± 1.04 ^{bc}	34.74	0.001*	0.921
Find a professional who can help with a mental health problem?”	7.88 ± 1.25 ^a	8.88 ± 1.25 ^b	9.13 ± 1.13 ^{bc}	27.00	0.001*	0.900
Refer a student-athlete to a professional for help with a mental health problem?”	7.63 ± 1.85	8.75 ± 1.04	8.50 ± 1.20	2.11	0.203	0.412
Help a student-athlete who has a mental health problem?”	6.88 ± 1.36 ^a	8.88 ± .99 ^b	8.63 ± .92 ^{bc}	13.77	0.006*	0.821
Locate useful information about a mental health problem?”	6.88 ± 1.25 ^a	9.00 ± 1.07 ^b	9.25 ± 1.04 ^{bc}	5.71	0.041*	0.656
Find someone who can help a student-athlete with a mental health problem?”	7.75 ± 1.49 ^a	9.00 ± 1.41 ^b	9.13 ± 1.13 ^{bc}	11.79	0.008*	0.797
Help a student-athlete get treatment for a mental health problem?”	7.37 ± 1.30 ^a	9.13 ± .99 ^b	8.75 ± 1.04 ^{bc}	10.40	0.011*	0.776
Provide assistance to a student-athlete who has a mental health problem?”	7.13 ± 1.25 ^a	9.35 ± 1.04 ^b	8.88 ± 1.13 ^{bc}	16.20	0.004*	0.844
Total Average	7.28 ± 1.02 ^a	8.98 ± 1.06 ^b	8.94 ± .99 ^{bc}	37.85	0.00*	0.930

* $p < .05$, Means with different letters (a,b,c) are significantly different. F/U = follow-up

The MCE form included four questions related to self-efficacy. Repeated measures ANOVA revealed significant improvements related to confidence levels from pre-course to post-course, as well as pre-course to one-month follow-up and in the overall average of this section. All η^2 effect sizes were large.

Table 2. MCE Form (Self-Efficacy Questions) Pre-/Post-/Follow-Up Comparisons.

<u>“Please rate your confidence in performing the following actions...”</u>	<u>Pre M ± SD</u>	<u>Post M ± SD</u>	<u>Post F/U M ± SD</u>	<u>F</u>	<u>p</u>	<u>η²</u>
Refer a person with mental health problems to appropriate help	3.38 ± .92 ^a	4.63 ± .52 ^b	4.25 ± .46 ^{bc}	41.00	0.00*	0.932
Talk with someone who is suicidal	2.88 ± .84 ^a	4.13 ± .35 ^b	4.25 ± .46 ^{bc}	29.00	.001*	0.906
Overall Average	3.13 ± .79 ^a	4.38 ± .35 ^b	4.44 ± .42 ^{bc}	33.00	.001*	0.917

* $p < .05$; Means with different letters (a,b,c) are significantly different. F/U = follow-up

The MHFA-USA Course Evaluation, completed at post-course, included a section with items related to self-efficacy. All items were rated over 4 out of 5 with the overall average confidence levels of the participants at 4.64 (SD=0.49 with 5 indicating “Strongly agree”).

Table 3. MHFA-USA Course Evaluation – Confidence Levels

<u>As a result of this training, I feel more confident that I can...</u>	<u>Mean</u>	<u>Std. Deviation</u>
Recognize the signs that someone may be dealing with a mental health problem, substance use challenge or crisis.	4.63	0.52
Reach out to someone who may be dealing with a mental health problem, substance use challenge or crisis.	4.50	0.54
Ask a person whether they’re considering killing themselves.	4.38	0.52
Actively and compassionately listen to someone in distress.	4.88	0.35
Offer a distressed person basic “first aid” level information and reassurance about mental health and substance use challenges.	4.63	0.52
Assist a person who may be dealing with a mental health problem, substance use challenge or crisis in seeking professional help.	4.75	0.46
Assist a person who may be dealing with a mental health problem, substance use challenge or crisis to connect with appropriate community, peer and personal supports.	4.63	0.52
Be aware of my own views and feelings about mental health problems, substance use challenges and disorders.	4.75	0.46
Recognize and correct misconceptions about mental health, substance use and mental illness as I encounter them.	4.62	0.52
Overall Average:	4.64	0.49

Referral Knowledge Best Practices

The RKQ showed no improvement when comparing pre-course (M = 9.75), post-course (M = 9.63), and one-month follow-up (M = 9.50). Given that scores represent number of correct responses out of 10, pre-course scores were initially high.

Overall Course Evaluation

The overall course evaluation ratings were positive, with an average rating at 4.62 (SD = 0.52) out of 5, 5 indicating “Strongly Agree.”

Table 4. MHFA-USA Evaluation – Overall

<u>Overall Course Evaluation:</u>	<u>Mean</u>	<u>Std. Deviation</u>
Course goals were clearly communicated.	4.62	0.52
Course goals and objectives were achieved.	4.62	0.52
Course content was practical and easy to understand.	4.63	0.52
There was adequate opportunity to practice the skills learned.	4.62	0.52
Overall Average:	4.62	0.52

Focus Group Interview Feedback. The researcher completed several readings of each document prior to circling key terms and phrases related to program evaluation feedback, including suggestions and recommendations. The researcher grouped similar responses to develop key terms: helpful, usefulness, and applicability. Many of the participants used words such as “helpful” when describing their overall impression of the course. Participants used the term helpful as a means of adding to the knowledge they have obtained. As participant A from Group B and participant D from Group A stated, respectively:

... putting it all together in one systematic way, that was very helpful.

... it expanded some of the things I previously knew... I like mnemonics so learning that will help me a lot going further.

There were mixed feelings regarding the repetitiveness of the course action plan to help the athletic trainers remember the various steps. Participant B from Group B appreciated the mnemonics and repetition, leading to the definition of “useful.” Useful in this population means the effectiveness of the MHFA-USA course tools that affect their self-confidence and knowledge.

I like how it didn't just go over the definitions of the different mental illness were and how to recognize them, it was more of how to deal with them and have a conversation. So, it gave you actual tools and not just information.

Other participants did not like the repetitiveness; however, when comparing the skills learned in athletic training (such as CPR/First Aid or injury evaluations), the participants changed their mind set and viewed the repetition to be beneficial and useful:

I feel like in a real-life situation, you would probably mix it up more according to, but learning it first hand, like, when we all learned evaluations, we all learned it in that order first.

Lastly, the participants described having some form of education in mental health area but without the application part. The MHFA-USA course prepared the ATs to use the knowledge they have obtained and apply to real-life scenarios confidently:

... for me all the training I've done in school, I've had bits of this, but it's nice to put it all together...

We just went over like, definitions of the different types, but not really how to go about helping with them or referring them

We were told to refer, we weren't told how to refer, we weren't told what to say.

All participants agreed that the course is very applicable to athletic trainers who directly interact with college SAs. ATs are placed at the forefront of SA's mental health wellness and require formidable training that is applicable to their clinical setting. This population viewed the MHFA-USA course applicable to their collegiate setting where they are not only an asset to SAs, but also their athletics departments and community.

Participant E from Group A and participant A from Group B stated, respectively:

... my coaches... come to me saying, we want to know more, how do we go about handling this [mental health issues] because this has become more relevant

... in this smaller community... if something happens to one of our kids, everybody is going to know about it... reaches a whole new slew of mental health issues... we're going to need that, we're going to need to know this stuff.

ATs explained that they have the knowledge from their educational backgrounds, but little to no experience of performing a real-life referral in a mental health issue scenario. By completing this course, the practicality of executing the actions was more tangible for ATs compared to the theories and ideas surrounding mental health during their academic years. All the participants agreed there needs to be a section on eating disorders within the MHFA-USA course because of the frequency they see these issues during clinical practice. The ATs recommend less information with the Psychosis and Opioid sections and instead replace them with applying the action plan ALGEE to eating disorders and disordered eating behaviors.

Discussion

Findings suggest that AT's self-efficacy within the area of mental health referral improved following the Mental Health First Aid-USA course, immediately and remained high at one-month post certification. Across the various questionnaires, the participants consistently reported improved self-efficacy of talking with a student-athlete regarding a mental health issue, recognizing signs and symptoms associated with mental health problems, and knowing when to refer a student-athlete for additional help. Most of the many questions assessing self-efficacy demonstrated statistically significant improvements at post-course. No significant improvement was evident in the participants' confidence with finding support for the student-athlete in the community and referring a student-athlete to a professional for help. This small improvement of confidence levels with referring student-athletes can be explained by the limited accessibility to local mental health resources within a smaller community. Participants discussed having a finite number of counselors who can assist with mental issues but difficult to find advanced mental health care for specific mental health illnesses like eating disorders during the MHFA-USA course. Most importantly, confidence levels remained higher post-certification which demonstrates the applicability and practicality of the MHFA-USA course.

The athletic training education competencies that include the Psychosocial Strategies and Referral state athletic trainers should “intervene and refer these individuals as necessary” (“National Athletic Trainers’ Association 5th Edition,” 2011, pg. 27). Therefore, an improvement in overall mental health referral knowledge of student-

athletes to advanced care naturally occurred because the MHFA-USA further expanded the previous knowledge and provided a platform to improve self-efficacy scores. This conclusion is also supported by the multiple statements within the focus interview groups regarding taking their (the participants) previous knowledge from prior educational sources and applying them to real-life scenarios, making the information applicable to clinical practice. The ATs learned the concepts of the MHFA-USA course, internalized it, and will apply the skills within their clinical setting.

The changes suggested to the course to make it more applicable to the college athletics setting included: increasing eating disorder information/action plan and decreasing the amount of time spent on schizophrenia (part of the Psychosis section) and Opioid section. These opinions were reflected in the demographics form where the participants rated mental health and eating disorders more valuable. Furthermore, ATs may or may not encounter a SA with a mental health illness at their university within the one-month before the last follow-up surveys were submitted. This component is important because, like other athletic-related injuries, mental health illnesses may not be highly prevalent during the data collection process. Nevertheless, the ATs within this study remained confident in their skills to recognize and to refer SAs for further medical care compared to their before they took the MHFA-USA course.

This research is a original study at how the MHFA-USA course affects the confidence of AT's in referring student-athletes for advanced mental health care. While the course itself has shown improvement in confidence levels in other populations (Massey et al., 2014; Moffitt et al., 2014; O'Reilly et al., 2011), the course also showed

improvements in referral self-efficacy of athletic trainers. There were limitations to this study. The study used a small sample of athletic trainers in one specific area. Despite the small sample size, the effect size was large indicating significant improvements within the self-efficacy area. Therefore, their experiences and referral responses were similar within the group. Despite the limitations, the findings provide a promising direction and need for further evaluation within the AT population.

CHAPTER II

DISSEMINATION

The NATA Research & Education Foundation AT Research Agenda's purpose is to discover research primacies and to unite research with clinical practice to improve patient care and to advance the profession of athletic training (Eberman et al., 2019). One of the research priorities includes health care competency. Within this category, the task force recognized the subcategory "recognizing and referring patients with behavioral (mental) health conditions" as a priority. The abstract of this dissertation will be submitted to the NATA Research & Education Foundation Free Communications Program to be disseminated at the National Athletic Trainers' Association Clinical Annual Symposium and AT Expo in 2020. The target audience will be ATs from across the nation. The aim is to submit the written abstract and to present the findings with future implications of the MHFA-USA course within the college ATs population.

Presentation

The presentation is titled "Improving College AT's Confidence with Mental Health Issues" (See Appendix K for presentation slides). Starting with the background of the NCAA *Mental Health Best Practices*, I will speak on the recommendations from this document regarding improving AT's training with mental health issues. The main training component suggested is the Question, Persuade, and Refer Training which focuses mainly on suicide intervention. However, research has shown that there are more

prevalent mental health illnesses that ATs need to be aware of that lead to suicidal ideation or self-harm (Auerbach et al., 2016; Neal et al., 2013). With ATs in a pivotal role to recognize early signs of mental health issues, there is a need for ATs to become properly trained.

Slide 3 and Slide 4

The NCAA *Mental Health Best Practices* aids athletic departments, which includes college athletic trainers, through recommendations to support and to promote student-athlete mental health well-being. This document was released in 2013 to help college departments; but there has been limited research on how effective it is on supporting and promoting student-athlete mental health well-being. The emergent situations that ATs could witness include (but are not limited to); suicide/homicide ideation; sexual assault; acute psychosis/paranoia; delirium; and acute intoxication or drug overdose. However, the Question, Persuade, Refer (QPR) training listed in the NCAA *Mental Health Best Practices* document is to train someone to help with an individual experiencing suicidal ideation, displaying early signs of suicide, and getting help for someone in a crisis (National Collegiate Athletic Association, 2016; *QPR Online Gatekeeper Training*, 2018). The QPR training has not been validated ATs working with the college student-athlete population and may not be the ideal training for ATs.

Slide 5 and Slide 6

However, Rao et al. (2015) published a study that demonstrated a lower incidence of suicidal rates in college student-athletes compared to the student population of the same age. This study is relevant because the NCAA is recommending a training that may

not be fully effective in preparing ATs help college SAs with mental health issues.

Despite the lower incidence of suicide, SAs still have a higher prevalence of other mental health illnesses such as anxiety and depression (Neal et al., 2013). There are a multitude stressors, pressures, and stigmas associated with mental health in SAs. While some of these reasons can be assumed, what is important to note here is the fact that these reasons have been thoroughly studied but no trainings have been evaluated to prepare the individuals who work directly with college SAs, including athletic trainers.

Slide 7 and Slide 8

Athletic trainers do not have the tools or resources to promote mental health wellness. Due to the old educational requirements and standards, ATs are only required to acquire “the ability to intervene and refer” individuals with mental health illnesses (*National Athletic Trainers’ Association 5th Edition, 2011*). However, it is not a requirement for ATs to obtain or perform skills as part of their skills components to increase confidence in their referral skills. Therefore, research has shown that ATs are not confident with their skills with individuals experiencing a mental health issue (Clement et al., 2013; Moulton et al., 1997; Vaughan et al., 2004). An alternative resource that encompasses much of the mental health illnesses the NCAA wants ATs to address and to refer for appropriate care is the Mental Health First Aid-USA course. The main objectives of the MHFA-USA course are to improve recognition of early signs of mental health issues, increase confidence, and identify appropriate professionals. This course prepares ATs with “what to say” once a mental health issues has been recognized. It gives practical application scenarios for ATs to work through, acknowledging helpful

things to say in the time of crises as well as be proactive rather than reactive to mental health illnesses. Early intervention is preached throughout this course, recognizing the warning signs and to get an individual help as soon as possible. Similar to CPR/First Aid, this course provides the ATs with the tools to intervene in an emergency as properly trained without going outside their scope of practice. For example, an AT can perform CPR on a person who has no heart beat until EMS arrives to transport for advanced medical care. With a mental health crisis, ATs can intervene confidently and speak with an individual experiencing a crisis to get them to appropriate care for behavioral or mental issues. It's the in-between "to recognize" and "to refer" that is missing in the NATA competencies that has been replaced with an appropriate training: MHFA-USA course.

Slide 9 and Slide 10

The purpose of the study was to evaluate the influence of the USA Mental Health First Aid course on college AT's confidence in referral knowledge and skills. The study's first aim was to determine the effect of the MHFA-USA course on college ATs' self-efficacy short-term and long-term. The study's second specific aim was to evaluate the MHFA-USA course based on participant feedback. In order to accomplish the purpose, three surveys were given to the participants prior to the start of the MHFA-USA course. These surveys measure self-efficacy with mental health referrals, referral knowledge, and aspects of the Theory of Planned Behavior, which the course was developed from (see slide 10). Immediately following the course, participants re-took the same three surveys and partook in focus group interviews to record feedback on the course. One month later,

the participants completed the same surveys. Repeated measures ANOVA was used on the data sets to measure differences of confidence levels.

Slide 11 through Slide 14

With eight participants in total, there was a significant increase in confidence levels in almost all sections (see highlighted sections on slide 11). There was improvement immediately following the course and the increased self-efficacy levels remained higher than pre-course levels even one-month later. This is critical to the ATs in this room because it shows a useful resource for everyone to improve confidence in your mental health training and referral skills. Additionally, the results from the interviews demonstrated the practicality of the course and supported the need for additional training to supplement their previous experiences and education in the realm of mental health (see slide 13). In conclusion, the Mental Health First Aid-USA is a superlative course to improve college AT's confidence levels with mental health issues.

Slide 15 and Slide 16

The implications for current, certified, and practicing athletic trainers at the college level include certifying ATs in the MHFA-USA course and continuing to evaluate the feasibility and effectiveness of the course in clinical settings. Per the Board of Certification (BOC) continuing education and certification requirements, all ATs are required to maintain CPR/First Aid certifications. Following this model, the BOC could require ATs to maintain current certification in MHFA-USA should the course continue to improve confidence levels in mental health referrals. Therefore, all ATs working with

adult populations will be prepared and confident to work with individuals with mental health issues.

With all athletic training education programs transitioning to Master's level, there are new standards that the programs will have to meet by the year 2022. Instead of developing or updating a specific domain for psychosocial behaviors, there currently is one standard proposed regarding mental health:

Standard 77: Identify, refer, and give support to patients with behavioral health conditions. Work with other health care professionals to monitor these patients' treatments, compliance, progress, and readiness to participate.

Annotation: These behavioral health conditions include (but are not limited to) suicidal ideation, depression, anxiety disorder, psychosis, mania, eating disorders, and attention deficit disorders. (*2020 Standards for Accreditation of Professional Athletic Training Programs*, 2018, p. 14)

The MHFA-USA course provides an overview and real-life scenarios to work through for participants, including suicide, anxiety, depression, psychosis, eating disorders and substance use disorders (*USA Mental Health First Aid: Research & evidence based*, 2018) (Appendix A). In order to make the course more applicable to college athletic trainers and students, the real-life scenarios could be adjusted to involve college student-athletes as examples. According to Standard 77, the course covers many of the behavioral health conditions required for athletic training students to show competency in during their educational years. The final step to improve confidence levels is to incorporate this course in education programs through general medical course or psychology courses. Another suggestion is to offer one-day certification course that occurs every two years. Like the CPR/First Aid requirement, completion of this course

should be essential prior to athletic training students completing the Board of Certification exam to become a certified athletic trainer.

CHAPTER III

ACTION PLAN

As demonstrated in the literature review, there is a need to improve ATs' confidence to refer student-athletes in times of mental health crises as well as with mental health challenges. Noticing the yellow flags (sub-clinical symptoms of a mental health illness) before they turn into a red flag, such as suicide attempt or non-suicidal self-injury. Athletic trainers learn what to do in certain instances of mental health emergency crises, to remain calm and to assist the student-athlete seek advanced medical care. ATs are not trained to diagnose mental health illnesses but are certainly in an ideal position to recognize when there could be a problem. This course teaches ATs the process "in-between" recognizing and referring SAs; it helps them approach the SA in a caring and understanding manner, knowing the "correct" terms and what to say that is helpful for the SA. ATs do not have this knowledge or experience from their educational programs because it's not required per the curriculum components set aside by CAATE. I believe offering the course as part of the certification process for athletic training students will better prepare future ATs. Additionally, the Board of Certification requires all certified ATs to be certified in CPR/First Aid; using the Board of Certification to have the MHFA-USA course as a mandatory training like CPR/First Aid to ATs is a possible solution to prepare current ATs. A long-term goal would be to study the effects the course has on confidence levels within athletics department personnel who interact with SAs regularly.

I plan on working with my Home university athletics department to certify all individuals who interact with SAs within the athletics department, including: strength coaches, sport coaches, academic advisors, and compliance officers. I am hosting several sessions throughout the summer of 2019 that athletics department personnel will sign up to complete the course. This course has the potential to improve confidence in these individuals surrounding mental health issues that might arise within the college SA population. To make this course more applicable, the course should adjust the real-life scenarios to SAs (or ATs' specific patient population) as well as reviewing eating disorders topic during the final scenario. This avenue of dissemination could be the next step in future directions of promoting this course. Athletic department personnel who have direct interaction with SAs will become certified and then develop wellness committees to promote mental health well-being. These committees meet to discuss "yellow flags" observed of student-athletes prior to them becoming "red flags." These committees could involve ATs, academic advisors, assistant coaches, strength coaches, and faculty athletics representative. Each entity interacts with college SAs differently and may be a witness to different behaviors that are warning signs. Together these warning signs can be addressed with the student-athlete as an early intervention.

To reach a larger, more diverse population, I plan to reach out to the colleges/universities located near Home university (two-hour driving radius) to participate in the MHFA-USA course and research project. Many of the surrounding colleges/university ATs were interested in completing the course during initial recruitment, but the timing of the course during the winter months was inconvenient. The

goal is to recruit and to study at least 30 ATs who have completed the MHFA-USA course.

With the help of a South Carolina Athletic Trainers' Association (SCATA) committee member, I applied to teach the MHFA-USA course to South Carolina certified ATs following the SCATA 2019 Annual Symposium. Eventually I plan to complete the additional trainings in other modules of MHFA-USA, including Higher Education, Youth and Public Safety sections. Therefore, ATs that work outside of the traditional college setting can be reached and trained in MHFA-USA course. As the course continues to gain popularity among ATs, I would like to promote the course at the educational level for athletic training programs. All athletic training students are required to be certified in First Aid and CPR; encouraging educators to promote the MHFA-USA course as a certification prior to graduation would produce more mental health first aiders that are athletic trainers, preparing them for their future careers.

Lastly, I plan to submit research findings and course objectives to the Board of Certification for athletic trainers. The BOC oversees all certifications and continuing education credits of ATs. I would like to have the BOC approve the MHFA-USA course as an Evidence-Based Practice (EBP) continuing education course for ATs. This approval would encourage even more certified ATs to participate in becoming certified and preparing themselves to help SAs. If all of the above is accomplished, I believe that ATs would be better prepared to meet the current needs to promote and to support the mental well-being of college SAs.

REFERENCES

- 2020 Standards for Accreditation of Professional Athletic Training Programs.* (2018, January 9). Retrieved from <https://caate.net/wp-content/uploads/2019/02/2020-Standards-Final-2-20-2019.pdf>
- Anthony, B., Bahn, M., Goldman, S., & Yoon, I. (2015). *Evaluation of Mental Health First Aid summary of psychometric study.*
- Athletic Training Education Competencies.* (n.d.).
- Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., ... Bruffaerts, R. (2016). Mental disorders among college students in the World Health Organization World Mental Health Surveys. *Psychological Medicine*, *46*(14), 2955–2970. <https://doi.org/10.1017/S0033291716001665>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215.
- Breslin, G., Shannon, S., Haughey, T., Donnelly, P., & Leavey, G. (2017). A systematic review of interventions to increase awareness of mental health and well-being in athletes, coaches and officials. *Systematic Reviews*, *6*(1). <https://doi.org/10.1186/s13643-017-0568-6>
- Clement, D., Granquist, M. D., & Arvinen-Barrow, M. M. (2013). Psychosocial aspects of athletic injuries as perceived by athletic trainers. *Journal of Athletic Training*, *48*(4), 512–521. <https://doi.org/10.4085/1062-6050-48.3.21>

- Cormier, M. L., & Zizzi, S. J. (2015). Athletic trainers' skills in identifying and managing athletes experiencing psychological distress. *Journal of Athletic Training, 50*(12), 1267–1276. <https://doi.org/10.4085/1062-6050-50.12.02>
- Eberman, L. E., Walker, S. E., Floyd, R. T., Covassin, T., Nolton, E., Valier, A. R. S., ... Earl-Boehm, J. (2019). The Prioritized Research Agenda for the Athletic Training Profession: A Report from the Strategic Alliance Research Agenda Task Force. *Journal of Athletic Training, 1062-6050-374–18*. <https://doi.org/10.4085/1062-6050-374-18>
- Hardeman, G. (2017, July). *The Need for Mental Health Education in the Athletic Training Profession*. Presented at the South Carolina Athletic Trainers' Association, Columbia, South Carolina.
- Kamphoff, C. S., Hamson-Utley, J. J., Antoine, B., Knutson, R., Thomas, J., & Hoenig, C. (2010). Athletic training students' perceptions of and academic preparation in the use of psychological skills in sport injury rehabilitation. *Athletic Training Education Journal, 5*(3), 109–116.
- Massey, J., Brooks, M., & Burrow, J. (2014). Evaluating the effectiveness of Mental Health First Aid training among student affairs staff at a Canadian university. *Journal of Student Affairs Research and Practice, 51*(3), 323–336.
- Moffitt, J., Bostock, J., & Cave, A. (2014). Promoting well-being and reducing stigma about mental health in the fire service. *Journal of Public Mental Health, 13*, 103–113.

- Moulton, M. A., Molstad, S., & Turner, S. (1997). The role of athletic trainers in counseling collegiate athletes. *Journal of Athletic Training, 32*(2), 148–150.
- National Athletic Trainers' Association 5th Edition. (2011). Retrieved from https://www.nata.org/sites/default/files/competencies_5th_edition.pdf
- National Collegiate Athletic Association. (2016). *Mental Health Best Practices: Inter-Association Consensus Document: Best Practices for Understanding and Supporting Student-Athlete Mental Wellness*. Presented at the Indianapolis, IN. Indianapolis, IN: NCAA Sport Science Institute.
- Neal, T. L. (2010). Game Changers: Mental-health issues can impair a student-athlete's performance, so support is critical. *Advance for Physical Therapy and Rehab Medicine, 21*, 32–33.
- Neal, T. L. (2012). Recognizing the signs. *Training and Conditioning, 23*(3), 36–43.
- Neal, T. L., Diamond, A. B., Goldman, S., Klossner, D., Morse, E. D., Pajak, D. E., ... Welzant, V. (2013). Inter-association recommendations for developing a plan to recognize and refer student-athletes with psychological concerns at the collegiate level: An executive summary of a consensus statement. *Journal of Athletic Training, 48*(5), 716–720. <https://doi.org/10.4085/1062-6050-48.4.13>
- O'Reilly, C., Bell, J., Kelly, P., & Chen, T. (2011). Impact of Mental Health First Aid training on pharmacy students' knowledge, attitudes, and self-reported behaviour. *Australian and New Zealand Journal of Psychiatry, 45*(7), 549–557.
- QPR Online Gatekeeper Training. (2018). Retrieved from <https://qprinstitute.com/individual-training>

- Rao, A. L., Asif, I. M., Drezner, J. A., Toresdahl, B. G., & Harmon, K. G. (2015). Suicide in National Collegiate Athletic Association (NCAA) athletes: A 9-year analysis of the NCAA resolutions database. *Sports Health: A Multidisciplinary Approach*, 7(5), 452–457. <https://doi.org/10.1177/1941738115587675>
- Rice, S. M., Purcell, R., De Silva, S., Mawren, D., McGorry, P. D., & Parker, A. G. (2016). The mental health of elite athletes: A narrative systematic review. *Sports Medicine*, 46(9), 1333–1353. <https://doi.org/10.1007/s40279-016-0492-2>
- Stiller-Ostrowski, J. L., & Hamson-Utley, J. J. (2010). Athletic trainers' educational satisfaction and technique use within the psychosocial intervention and referral content area. *Athletic Training Education Journal*, 5(1), 4–11.
- USA Mental Health First Aid: Research & evidence based.* (2018). Retrieved from <https://www.mentalhealthfirstaid.org/about/research/>
- Van Raalte, J. L., Cornelius, A. E., Andrews, S., Diehl, N. S., & Brewer, B. W. (2015). Mental health referral for student-athletes: Web-based education and training. *Journal of Clinical Sport Psychology*, 9(3), 197–212. <https://doi.org/10.1123/jcsp.2015-0011>
- Vaughan, J. L., King, K. A., & Cottrell, R. R. (2004). Collegiate athletic trainers' confidence in helping female athletes with eating disorders. *Journal of Athletic Training*, 39(1), 71–76.
- Watson, J. C. (2005). College student-athletes' attitudes toward help-seeking behavior and expectations of counseling services. *Journal of College Student Development*, 46(4), 442–449. <https://doi.org/10.1353/csd.2005.0044>

Yang, J., Peek-Asa, C., Corlette, J. D., Cheng, G., Foster, D. T., & Albright, J. (2007).
Prevalence of and risk factors associated with symptoms of depression in
competitive collegiate student athletes. *Clinical Journal of Sport Medicine*, 17(6),
481–487. <https://doi.org/10.1097/JSM.0b013e31815aed6b>

APPENDIX A

MENTAL HEALTH FIRST AID COURSE OUTLINE

MENTAL HEALTH FIRST AID USA 8 Hour Curriculum Outline
TOPIC
Opening remarks and Introduction to Mental Health First Aid
Session 1: Part 1
<p>Welcome to MHFA Overview of MHFA Overview of the MHFA Manual Why Mental Health First Aid What is a Mental Disorder?</p> <ul style="list-style-type: none"> • Spectrums of Mental Health Spectrum <p>Introduction of MHFA Action Plan DEPRESSION & Anxiety Disorders ANXIETY DISORDERS: Overview</p> <ul style="list-style-type: none"> • Risk Factors for Depression & Anxiety <p><u>MHFA Action Plan for Depression & Anxiety</u> Action A: Assess for Risk of Suicide or Harm <u>MHFA Action Plan- Non-Suicidal Self-Injury</u> Listening Nonjudgmentally Give Reassurance and Information Action E: Encourage Appropriate Professional Help & Encourage Self-Help and Other Support Strategies</p>
TOPIC
Session 2: Part 1
<p>MHFA Action Plan Assessing for Panic Attack Assessing a Person Affected by a Traumatic Event PSYCHOTIC DISORDERS: Group Discussion – What comes to mind? What is Psychosis Types of Psychotic Disorders Characteristics of Schizophrenia & Bipolar (Mania) Without Early Intervention MHFA Action Plan ALGEE Action A: Assess for Risk of Suicide or Harm How to Help Action L: Listen Non-judgmentally Action G: Give Reassurance & Information Action E: Encourage Appropriate Professional Help Action E: Encourage Self-Help and Other Support Strategies</p>

Session 2: Part 2

SUBSTANCE USE DISORDERS:

What are Substance use disorders?

Symptoms of Substance Dependence

Risk Factors for Substance Use Disorders

ALGEE for Substance Use Disorders

Assess for Risk of Suicide or Harm

Action L: Listen Non-judgmentally

Opioid Overdose ALGEE

Action G: Give Reassurance & Information

Action E: Encourage Appropriate Professional Help

Action E: Encourage Self-Help and Other Support Strategies

Helpful Resources for Substance use Disorder

8-Hour Course Exam & Evaluation

Presentation of 8 Hour Certificates

Adjournment

APPENDIX B

EMAIL RECRUITMENT/IN-PERSON RECRUITMENT SCRIPT

Hello [Insert College/University Name] Athletic Trainers!

My name is [REDACTED] and I currently work at [REDACTED] as an Assistant Athletic Trainer. I will be teaching your USA Mental Health First Aid course [Insert Date]. You are receiving this email because you are attending the course and registered as a college athletic trainer working with an NCAA sanctioned sport. I am inviting you to participate in my research study to determine if the USA Mental Health First Aid course improves your referral knowledge and confidence levels. Participation in the study is completely voluntary and will not affect your participation of the course.

What I need from you...

1. Review the consent form [REDACTED]
2. Complete pre-course survey questions prior to the start of the course on [Insert Date] via [REDACTED]
3. Complete post-course survey questions immediately following course completion
4. Participate in focus group interview
5. Complete post-course survey-questions 1 month following course completion

Surveys will take no longer than 10 minutes each and the focus group interview will last 60 minutes maximum. All participants will be entered in a drawing to win a \$10 Starbucks, Target, or Amazon gift card upon completion of the study.

If you have any questions, please contact me: [REDACTED] or [REDACTED].

Thank you!

[REDACTED]

RECRUITMENT IN-PERSON SCRIPT

My name is [REDACTED], a *graduate student* from the Department of Kinesiology at [REDACTED]. I would like to invite you to participate in my research study to evaluate the efficacy of this Mental Health First Aid course in college athletic trainers. You may participate if you provide athletic training services with an NCAA sanctioned team and you are in good standing with your current state license/certification. Please do not participate if you have been previously trained in mental health first aid through this MHFA-US course.

As a participant, you will be asked to complete pre-course questionnaires that will last 10 minutes, post-course questionnaires that will additionally last 10 minutes, and a focus group interview for 60 minutes. One month from completion of this course, I will ask that you complete the post-course survey again.

This study poses minimal risks, no compensation and no cost to you as a participant. All participants who complete the study fully will be entered into a drawing to win either \$10 Amazon, Target, or Starbuck gift card. All study information will be kept in a secure online system through [REDACTED] and remain strictly confidential and anonymous.

If you would like to participate in this research study, please review the written consent form and pick up this packet of surveys. You will complete the pre-course questionnaires prior to the US-MHFA course. Immediately following this course, you will complete the post-course questionnaires. You then will be scheduled for a focus group interview soon.

Do you have any questions now?

If you have questions later, please contact me at [REDACTED] or [REDACTED] or you may contact my advisor, [REDACTED] at [REDACTED].

licensure or certification as well as the Board of Certification. You must be currently enrolled in the MHFA-US course. You must not be previously trained in mental health first aid through the MHFA-US course.

What will you ask me to do if I agree to be in the study?

If you agree to be in the study, you will complete pre-course surveys regarding your referral knowledge and self-efficacy in mental health awareness which should last no longer than 10 minutes. You will then complete the MHFA-US course (8 hours in total for certification) and complete a course evaluation and post-course surveys which should last 10 minutes. Lastly, you will be asked to complete a focus group interview regarding your opinion on the course and will be sent post-course surveys 1 month after course completion.

Is there any audio/video recording?

There will be an audio recording of the focus group interviews prior to transcribing the interviews for research. Because your voice will be potentially identifiable by anyone who hears the recording, your confidentiality for things you say on the recording cannot be guaranteed although the researcher will try to limit access to the recording as described below.

What are the risks to me?

The Institutional Review Board at the [REDACTED] has determined that participation in this study poses minimal risk to participants.

If you have questions, want more information or have suggestions, please contact [REDACTED] who can be reached at [REDACTED] or [REDACTED], Faculty Advisor [REDACTED].

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at [REDACTED] toll-free at [REDACTED].

Are there any benefits to society as a result of me taking part in this research?

Due to the positive impacts this certification course has had on other participants, the MHFA-US certification program may provide athletics trainers with a valuable resource in the form of appropriate training in mental health illness recognition, self-efficacy, and referral knowledge than may be adapted to the meet the needs of various college sports medicine departments.

Are there any benefits to me for taking part in this research study?

There are no direct benefits to participants in this study.

Will I get paid for being in the study? Will it cost me anything?

There are no costs to you or payments made for participating in this study. There will be a random drawing with all participants who completed the study fully for a \$10 Amazon, Target, or Starbucks gift card.

How will you keep my information confidential?

All study information will be kept in a secure online system through [REDACTED] called [REDACTED]. Each person will be given a participant code to ensure confidentiality during the study. Survey questions and transcriptions of the focus group interviews will be uploaded to [REDACTED] for a minimum of five years from the time of the study completion. All information obtained in this study is strictly confidential unless disclosure is required by law.

Absolute confidentiality of data provided through the Internet cannot be guaranteed due to the limited protections of Internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing. For more information regarding the Qualtrics Security Statement, please refer to their site page: <https://www.qualtrics.com/security-statement/>

What if I want to leave the study?

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state. The investigators also have the right to stop your participation at any time. This could be because you have had an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped.

What about new information/changes in the study?

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

Voluntary Consent by Participant:

By completing in the study-related activities, you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By completing in the study-related activities, you are agreeing that you are 18 years of age or older and are agreeing to participate, in this study described to you by [REDACTED].

APPENDIX D

PATIENT DEMOGRAPHICS

Participant Code Number _____

NCAA STUDENT-ATHLETE REFERRAL MHFA-USA QUESTIONNAIRE

Directions: Fill in the blank or circle that best indicates your answer. Darken the ovals completely. Please make sure your marks are as follows:

Like this ● Not like this ○ ~~○~~ ~~○~~ ~~○~~

1. What is your age? _____ years

2. Gender: ○ Male ○ Female

3. Years working in college/university:

○ <1 Year ○ 1-5 Years ○ 6-10 Years ○ 10-15 Years ○ 15+ Years

4. What is your current position/title?

5. What are your academic degrees (e.g., BS, MS)?

6. What are your current state licenses/certifications?

7. Ethnicity:

○ Hispanic or Latino ○ Not Hispanic or Latino

8. Race:

- African-American/Black
- Asian
- Hawaiian or other Pacific Islander
- Native American
- White
- Other _____

9. Are you an athletic trainer of an NCAA sanctioned sports team? ○ Yes ○ No

10. If yes, which intercollegiate sports teams do you provide athletic training services for?
(OPEN ENDED)

11. The college/university you work at is:

- NCAA Division 1
- NCAA Division 2
- NCAA Division 3
- other _____

12. The college/university you attend is located in what state? _____

13. How valuable would materials for athletic trainers be on the following topics?

	not at all	moderately		very	
a. body image/eating disorders	<input type="radio"/>				
b. mental health symptoms	<input type="radio"/>				
c. concussion	<input type="radio"/>				
d. gambling	<input type="radio"/>				
e. injury	<input type="radio"/>				
f. substance abuse	<input type="radio"/>				

APPENDIX E

MENTAL HEALTH EFFICACY QUESTIONNAIRE

Directions: Please rate your confidence in your ability to do the following.

Circle the number that best indicates your answer.

- 1. How confident are you that you can find resources related to mental health problems?**
0 1 2 3 4 5 6 7 8 9 10
not at all confident moderately confident very confident
- 2. How confident are you that you can find a professional who can help with a mental health problem?**
0 1 2 3 4 5 6 7 8 9 10
not at all confident moderately confident very confident
- 3. How confident are you that you can refer a student-athlete to a professional for help with a mental health problem?**
0 1 2 3 4 5 6 7 8 9 10
not at all confident moderately confident very confident
- 4. How confident are you that you can help a student-athlete who has a mental health problem?**
0 1 2 3 4 5 6 7 8 9 10
not at all confident moderately confident very confident
- 5. How confident are you that you can locate useful information about mental health problems?**
0 1 2 3 4 5 6 7 8 9 10
not at all confident moderately confident very confident
- 6. How confident are you that you can find someone who can help a student-athlete with a mental health problem?**
0 1 2 3 4 5 6 7 8 9 10
not at all confident moderately confident very confident
- 7. How confident are you that you can help a student-athlete get treatment for a mental health problem?**
0 1 2 3 4 5 6 7 8 9 10
not at all confident moderately confident very confident
- 8. How confident are you that you can provide assistance to a student-athlete who has a mental health problem?**
0 1 2 3 4 5 6 7 8 9 10
not at all confident moderately confident very confident

APPENDIX F

MENTAL HEALTH REFERRAL KNOWLEDGE QUESTIONNAIRE

Directions: Fill in the circle that best indicates your answer. Darken the ovals completely. Please make sure your marks are as follows:

Like this ● Not like this ○ ~~○~~ ~~○~~

	TRUE	FALSE
1. It is important for athletes to work out their personal and mental health issues themselves without professional help.	○	○
2. Making a mental health referral for a student-athlete can be difficult or awkward even if you know the correct steps to take.	○	○
3. Talking to student-athletes about their mental health usually makes things worse.	○	○
4. Mental health counseling services can be found on most college campuses.	○	○
5. It is best to find the “perfect time” to discuss a student-athlete’s mental health or to make a mental health referral.	○	○
6. It may take more than one conversation for a student-athlete to get the mental health help that they need.	○	○
7. It is a good to make a referral when you recognize a mental health problem even if the problem does not appear to be serious.	○	○
8. Student-athletes who say that they are suicidal are almost always just trying to get attention.	○	○
9. Mental health services are too expensive for most student-athletes to afford.	○	○
10. Talking to a student-athlete privately is a good way to make a mental health referral.	○	○

APPENDIX G

MENTAL HEALTH COURSE EFFECTIVENESS QUESTIONNAIRE

Behavioral Intentions:

Please select the response that best describes the likelihood that you would carry out the following actions.

	Not at all likely			Extremely likely	
I will approach someone with a mental health problem if I feel I have the knowledge to talk to them about the problem.	1	2	3	4	5
I will help someone experiencing mental health symptoms to find supports if I know the resources available in the community.	1	2	3	4	5

Attitudes or Beliefs:

For each statement below, please select the response that best describes your opinion about how likely a person with a mental health problem will respond to a specific action you carry out.

	Not at all likely			Extremely likely	
If I ask about suicidal thoughts directly, a person with such thoughts will feel a sense of relief.	1	2	3	4	5

Each statement relates to different areas of mental health. Please pick the answer choice that best describes how you currently feel.

Talking with someone experiencing a mental health problem(s) about his/her problem(s) is:

Not at all difficult	1	2	3	4	5	Extremely difficult
Not at all rewarding	1	2	3	4	5	Extremely rewarding
Not at all useful	1	2	3	4	5	Extremely useful

Social Beliefs:

I believe that people with mental health problems ...

	Do not agree at all			Strongly agree	
Are seeking attention	1	2	3	4	5
Are easy to talk to	1	2	3	4	5
Have only themselves to blame	1	2	3	4	5

People who are important to me believe that people with mental health problem(s):

	Do not agree at all			Strongly agree	
Are seeking attention	1	2	3	4	5
Are easy to talk to	1	2	3	4	5
Have only themselves to blame	1	2	3	4	5

Self-Efficacy: Self Confidence and Control

Please rate your confidence in performing the following actions...

	Do not agree at all			Strongly agree	
Refer a person with mental health problems to appropriate help	1	2	3	4	5
Talk with someone who is suicidal	1	2	3	4	5

Please select the response that best describes the likelihood that you would carry out the following actions.

	Not at all likely			Extremely likely	
I will approach someone with a mental health problem(s) if I feel I have the knowledge to talk to them about the problem.	1	2	3	4	5
I will help someone experiencing mental health symptoms to find supports if I know the resources available in the community.	1	2	3	4	5

Knowledge and Skills:

Please select the response that best describes your level of agreement with the following statements (do not agree, agree, don't know).

	Do not agree	Agree	Don't know
At least 1 in 5 people in the US have one or more mental health disorder(s) in any one year.			
Around half of mental disorders start during childhood or adolescence.			
It is not a good idea to ask someone if they are feeling suicidal in case you put the idea in their head.			
Use of alcohol or other drugs increases the risk of suicide or harm.			
Schizophrenia is one of the most common mental disorders in the US.			
When talking to people with eating disorders, it is important to criticize their body size.			
Exposure to traumatic event(s) is a risk factor in almost every type of mental illness.			

Cues to Action:

In the past year, have you encountered anyone displaying the following mental health related signs and symptoms (no/yes, how many times?):

	No	Yes	How many times?
Physical signs like changes in normal patterns or appearance?			
Emotional symptoms like depressed mood, irritability, excessive anxiety or worry?			
Behavioral signs like crying, withdrawal, aggression, phobias, excessive use of alcohol or drugs?			
Extreme distress?			
Difficulties in school, social settings, or daily activities?			

Behavior: Referrals (only on pre-survey questions)

In the past year, have you referred anyone to services and supports (no/yes)?

If yes what type of services and supports did you refer the person(s) to? (mark all that apply.)

- Individual mental health professional
- Community mental health agency providing mental health services
- Private practice providing mental health counseling
- National crisis hotline phone number
- Local crisis hotline phone number
- Local hospital
- Clergy
- Local support groups
- Self-help strategies (e.g. books, websites, yoga, meditation, etc.)
- Other (*Please specify*):

In the past year, have you reached out to anyone whom you believe has a mental health problem(s) in any of the following ways (yes/no, how many times): (only on pre-survey)

- Assessed the situation for the presence of a crisis (A)
- Talked to someone about his/her suicidal thoughts (A)
- Spent time listening to someone (L)
- Gave someone information about his/her problem(s) (G)
- Helped someone to calm down (G)
- Suggested options for getting help €
- Encouraged someone to seek professional help (E)
- Recommended self-help strategies (E)
- Encouraged someone to get other supports (E)
- Engaged family members to help (E)

APPENDIX H

MENTAL HEALTH COURSE EVALUATION FORM

ADULT MENTAL HEALTH FIRST AID PARTICIPANT EVALUATION

Location of the course: _____

Dates of the course: _____

Instructor(s): _____

I. Overall Course Evaluation

		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1.	Course goals were clearly communicated.	1	2	3	4	5
2.	Course goals and objectives were achieved.	1	2	3	4	5
3.	Course content was practical and easy to understand.	1	2	3	4	5
4.	There was adequate opportunity to practice the skills learned.	1	2	3	4	5

I received an official, soft cover-bound Mental Health First Aid USA manual to take home with me. Yes ___ No ___

If No, please explain (i.e. "I received a paper copy of the manual," "I returned my manual to my instructor after class," etc.):

I. A. Presenter Evaluation: Instructor #1 Name: _____

		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
5.	The instructor's presentation skills were engaging and approachable.	1	2	3	4	5
6.	The instructor demonstrated knowledge of the material presented.	1	2	3	4	5
7.	The instructor facilitated activities and discussion in a clear and effective manner.	1	2	3	4	5
8.	Feedback for <u>this</u> instructor.					

I. B. Presenter Evaluation: Instructor #2 Name: _____

		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
9.	The instructor's presentation skills were engaging and approachable.	1	2	3	4	5
10.	The instructor demonstrated knowledge of the material presented.	1	2	3	4	5
11.	The instructor facilitated activities and discussion in a clear and effective manner.	1	2	3	4	5
12.	Feedback for <u>this</u> instructor.					

IV. Practical Application

	As a result of this training, I feel more confident that I can...	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
13.	Recognize the signs that someone may be dealing with a mental health problem, substance use challenge or crisis.	1	2	3	4	5
14.	Reach out to someone who may be dealing with a mental health problem, substance use challenge or crisis.	1	2	3	4	5
15.	Ask a person whether they're considering killing themselves.	1	2	3	4	5
16.	Actively and compassionately listen to someone in distress.	1	2	3	4	5
17.	Offer a distressed person basic "first aid" level information and reassurance about mental health and substance use challenges.	1	2	3	4	5
18.	Assist a person who may be dealing with a mental health problem, substance use challenge or crisis in seeking professional help.	1	2	3	4	5
19.	Assist a person who may be dealing with a mental health problem, substance use challenge or crisis to connect with appropriate community, peer and personal supports.	1	2	3	4	5
20.	Be aware of my own views and feelings about mental health problems, substance use challenges and disorders.	1	2	3	4	5
21.	Recognize and correct misconceptions about mental health, substance use and mental illness as I encounter them.	1	2	3	4	5

What is your overall response to this course? (Please check all that apply)

- This course was helpful and informative
- This course has better prepared me for the work that I do professionally
- This course did not have a sufficient amount of activities and information to prepare me to be a first aider
- I did not feel that I benefited from this course
- Other
- I choose not to respond

What do you consider to be the strengths of the course? (Please check all that apply)

- ALGEE and the hands-on practice in class
- The instructor's presentation style and engagement
- The length of the course
- Other
- I choose not to respond

What do you consider to be the weaknesses of the course? (Please check all that apply)

- The course was too short and I need more time to practice what I learned
- The course was too long
- There were not enough hands-on exercises
- Other
- I choose not to respond

Was there any issue or topic you expected this course to cover that it did not address?

Would you recommend this course to others? Yes___ No___

If no, why not?

Any other comments?

26. Why did you attend this course? (circle all that apply)

a.	My employer asked / assigned me	d.	Other professional development (specify profession)
b.	Personal interest	e.	Community or volunteer interest (please specify)
c.	Other:		

27. How did you hear about this course? (circle all that apply)

a.	My employer asked / assigned me	f.	Newsletter or bulletin (Which one?)
b.	Word of mouth, not employer (Who?)	g.	Radio (Which station?)
c.	Website (Which one?)	h.	Newspaper (Which paper?)
d.	Email notice (From whom?)	i.	TV (Which station?)
e.	Flier or brochure (Obtained where?)	j.	Other:

Was there any issue or topic you expected this course to cover that it did not address?

- At work (please describe your work position): _____
- As a parent / guardian
- As a family member
- As a peer / friend
- As a volunteer / mentor
- Other (please describe): _____

What is your gender?

- Male
- Female
- I identify as neither male nor female.

How do you describe your race / ethnicity? (Please circle all that apply)

a.	American Indian or Alaskan Native	e.	Native Hawaiian or other Pacific Islander
b.	Asian	f.	Caucasian / White
c.	Black or African American	g.	I choose not to respond
d.	Hispanic or Latino origin	h.	Other:

What is your age?

- 18-24 years
- 25-44 years
- 45-60 years
- 61-80 years
- 81 years or older

I identify as a person with lived experience or a person in long-term recovery.

Yes

No

I support a family member with serious mental illness.

Yes

No

APPENDIX I

FOCUS GROUP INTERVIEW GUIDE

1. What are your overall impressions of the MHFA-USA course?
 - a. Are there any things that could be changed in the MHFA-USA course?
2. How appropriate/applicable do you think this course is for NCAA athletic trainers?
3. Have you made referrals prior to this course?
4. Do you have mental health resources/services already available for the student-athletes?
5. Would you recommend this course for athletics department staff at your college/university in its current form? Why?

APPENDIX J

MCE PRE-/POST-/F/U COMPARISONS

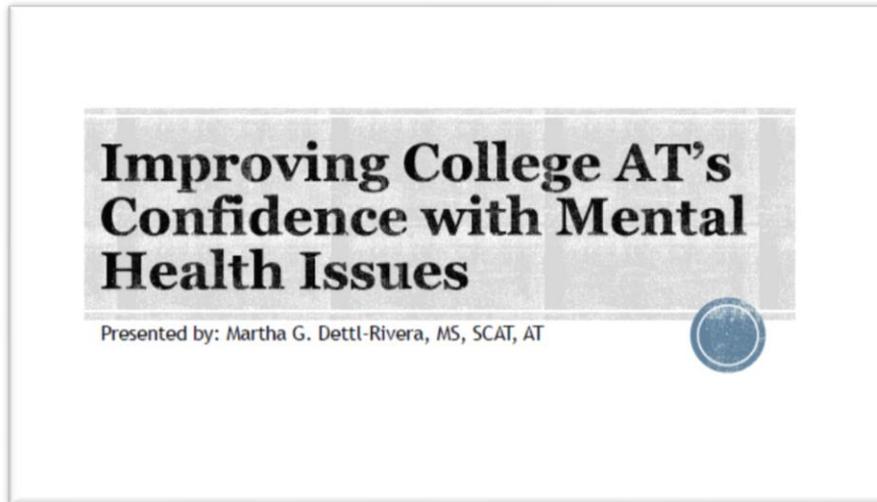
Mental Health Course Effectiveness

<u>Behavioral Intentions</u>	<u>Pre M ± SD</u>	<u>Post M ± SD</u>	<u>Post F/U ± SD</u>	<u>F</u>	<u>p</u>	<u>eta squared</u>
I will approach someone with a mental health problem if I feel I have the knowledge to talk to them about the problem.	4.25 ± .71	4.25 ± 1.04	4.25 ± .74	0.59	0.58	0.17
I will help someone experiencing mental health symptoms to find supports if I know the resources available in the community.	4.50 ± .54	4.25 ± 1.04	4.75 ± .71	0.60	0.58	0.17
Overall Average	4.38 ± .58	4.25 ± 1.04	4.69 ± .70	0.62	0.57	0.17
<u>Attitudes/Beliefs</u>	<u>Pre M ± SD</u>	<u>Post M ± SD</u>	<u>Post F/U ± SD</u>	<u>F</u>	<u>p</u>	<u>eta squared</u>
If I ask about suicidal thoughts directly, a person with such thoughts will feel a sense of relief.	3.00 ± .76	4.00 ± .76	4.25 ± .71	27.00	.001*	0.90
<u>Talking with someone experiencing a mental health problem(s) about his/her problem(s) is:</u>	<u>Pre M ± SD</u>	<u>Post M ± SD</u>	<u>Post F/U ± SD</u>	<u>F</u>	<u>p</u>	<u>eta squared</u>
Difficult	3.38 ± .74 ^a	2.38 ± 1.19 ^b	2.63 ± .52	5.78	.040*	0.66
Rewarding	3.38 ± .74	4.13 ± .64	4.13 ± .64	1.80	0.24	0.38
Useful	4.00 ± .54 ^a	4.63 ± .52 ^b	4.63 ± .52	11.67	.011*	0.63
<u>Social Beliefs : I believe that people with mental health problems...</u>	<u>Pre M ± SD</u>	<u>Post M ± SD</u>	<u>Post F/U ± SD</u>	<u>F</u>	<u>p</u>	<u>eta squared</u>
Are seeking attention	1.88 ± .84	1.75 ± .71	1.75 ± 1.04	0.13	0.88	0.04
Are easy to talk to	3.13 ± .64	3.00 ± .93	2.63 ± .74	1.03	0.41	0.26
Have only themselves to blame	1.25 ± .46	1.13 ± .36	1.00 ± .00	1.00	0.42	0.25
<u>Social Beliefs: People who are important to me believe that people with mental health problem(s):</u>	<u>Pre M ± SD</u>	<u>Post M ± SD</u>	<u>Post F/U ± SD</u>	<u>F</u>	<u>p</u>	<u>eta squared</u>
Are seeking attention	2.75 ± 1.17	2.88 ± .84	2.50 ± 1.20	0.68	0.54	1.86
Are easy to talk to	2.50 ± .93	2.50 ± .76	2.38 ± .74	0.08	0.93	0.03
Have only themselves to blame	2.25 ± .89	2.50 ± .76	2.00 ± 1.07	0.79	0.50	0.21

* $p < .05$; Means with different letters (a,b,) are significantly different. F/U = follow-up

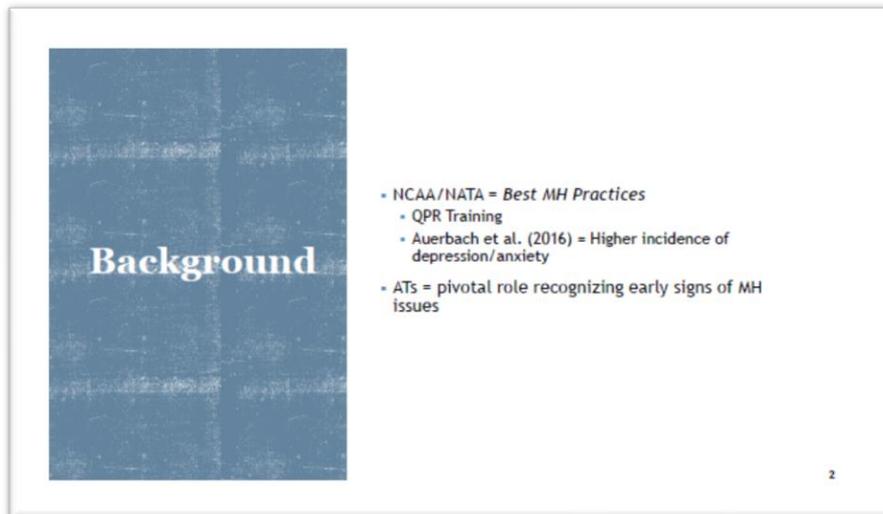
APPENDIX K

DISSEMINATION PRESENTATION



Improving College AT's Confidence with Mental Health Issues

Presented by: Martha G. Dettl-Rivera, MS, SCAT, AT



Background

- NCAA/NATA = *Best MH Practices*
 - QPR Training
 - Auerbach et al. (2016) = Higher incidence of depression/anxiety
- ATs = pivotal role recognizing early signs of MH issues

2

NCAA Mental Health Best Practices

- provides sports medicine and athletics departments with recommendations to support and to promote SA mental health well-being
- examples of emergent situations that may arise in college athletics departments, including suicide or homicide ideation, sexual assault victims, acute psychosis or paranoia, delirium states, and acute intoxication or drug overdose

(National Collegiate Athletic Association, 2016)



Question, Persuade, Refer (QPR)

For someone who is experiencing suicidal ideation, displaying warning signs of suicide, and how to get help for someone in crisis

- How to:
 - Question
 - Persuade
 - Refer

(National Collegiate Athletic Association, 2016; *QPR Online Gatekeeper Training*, 2018).





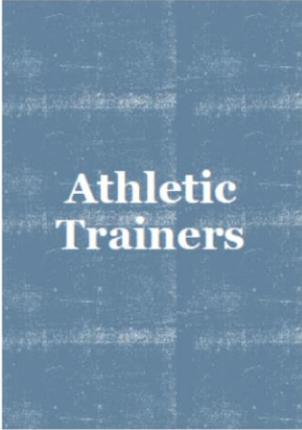
A 2015 study showed that the suicide rate in college SA was lower than that of the general student population of similar age (Rao, Asif, Drezner, Toresdahl, & Harmon, 2015).

Despite the lower incidence of suicide, SAs have a higher prevalence of other mental health illnesses such as anxiety and depression (Neal et al., 2013),

Why Depression & Anxiety?

Stressors	Pressures	MH Stigma
<ul style="list-style-type: none">• Managing/balancing full schedules• Practice/Competition; Injuries; Classes/Studying; Traveling	<ul style="list-style-type: none">• Win• Family, fans, coaches• Expectations	<ul style="list-style-type: none">• Labels - Crazy, Ill, Mentally Tough• Limited awareness• Unavailability





Athletic Trainers

- limited experience using the necessary tools or resources to promote mental health wellness
- “the ability to intervene and refer these individuals as necessary” (“National Athletic Trainers’ Association 5th Edition,” 2011, pg. 27)
- do not feel confident with their skills identifying and referring SAs with a mental illness to further advanced care (Clement, Granquist, & Arvinen-Barrow, 2013; Moulton, Molstad, & Turner, 1997; Vaughan et al., 2004).

7



MHFA-USA



MENTAL
HEALTH
FIRST AID

USA - Mental Health First Aid designed to improve recognition of early signs of MH issues, increase confidence, and identify appropriate professionals
(USA Mental Health First Aid: Research & evidence based, 2018)

Purpose

- To evaluate the influence of the USA Mental Health First Aid Course on college ATs' confidence in their knowledge and referral for those with mental health illnesses.
 - Aim #1: Determine the effect of the MHFA-USA course on college ATs' self-efficacy for mental health knowledge and referral.
 - Aim #2: Evaluate MHFA-USA course based on participant feedback.

9

Pre-Course Surveys

- Mental Health Efficacy Questionnaire (MHEQ)
- Referral Knowledge Questionnaire (RKQ)
- MHFA-USA Course Effectiveness (MCE) Form

Post-Course Surveys

- MHEQ
- RKQ
- MCE (except referral section)
- MHFA-USA Course Evaluation Form
- Focus Group Interviews

One-Month Follow-Up

- MHEQ
- RKQ
- MCE (except referral section)

Methods

10

Results = Improved Confidence

MHEQ Pre-, Post-, One-Month Follow-Up Comparisons

How confident are you that you can...	Pre M = SD	Post M = SD	F/U M = SD	F	p	η^2
Find resources related to mental health problems?*	6.75 = 1.58 ^a	9.00 = 1.20 ^b	9.26 = 1.04 ^{bc}	34.74	0.001*	0.921
Find a professional who can help with a mental health problem?*	7.88 = 1.25 ^a	8.88 = 1.25 ^b	9.13 = 1.13 ^{bc}	27.00	0.001*	0.900
Refer a student-athlete to a professional for help with a mental health problem?*	7.63 = 1.85	8.75 = 1.04	8.90 = 1.20	2.11	0.203	0.412
Help a student-athlete who has a mental health problem?*	8.88 = 1.38 ^a	8.88 = .99 ^a	8.63 = .92 ^{bc}	13.77	0.006*	0.821
Locate useful information about a mental health problem?*	8.88 = 1.25 ^a	9.00 = 1.07 ^b	9.25 = 1.04 ^{bc}	5.71	0.041*	0.656
Find someone who can help a student-athlete with a mental health problem?*	7.75 = 1.49 ^a	9.00 = 1.41 ^b	9.13 = 1.13 ^{bc}	11.79	0.008*	0.797
Help a student-athlete get treatment for a mental health problem?*	7.37 = 1.30 ^a	9.13 = .99 ^b	8.75 = 1.04 ^{bc}	10.40	0.011*	0.776
Provide assistance to a student-athlete who has a mental health problem?*	7.13 = 1.25 ^a	9.35 = 1.04 ^b	8.88 = 1.13 ^{bc}	16.20	0.004*	0.844
Total Average	7.28 = 1.02^a	8.98 = 1.06^b	8.94 = .99^{bc}	37.85	0.00*	0.930

*p < .05; Means with different letters (a,b,c) are significantly different. F/U = Follow-up

11

MCE Pre-, Post-, One-Month Follow-Up Comparisons

Please rate your confidence in performing the following actions...	Pre M = SD	Post M = SD	Post F/U M = SD	F	p	η^2
Refer a person with mental health problems to appropriate help	3.38 = .92 ^a	4.63 = .52 ^b	4.25 = .463 ^{bc}	41.00	0.00*	0.932
Talk with someone who is suicidal	2.88 = .84 ^a	4.13 = .35 ^b	4.25 = .46 ^{bc}	29.00	.001*	0.906
Overall Average	3.13 = .79^a	4.38 = .35^b	4.44 = .42^{bc}	33.00	.001*	0.917

*p < .05; Means with different letters (a,b,c) are significantly different. F/U = follow-up

Results = Improved Confidence



12

Participant Feedback

“Helpful”

“... putting it all together in one systematic way, that was very helpful.”
“... it expanded some of the things I previously knew... I like mnemonics so learning that will help me a lot going further.”

“Useful”

“I like how it didn't just go over the definitions of the different mental illness were and how to recognize them, it was more of how to deal with them and have a conversation. So, it gave you actual tools and not just information.”

“Applicable”

“... my coaches... come to me saying, “we want to know more, how do we go about handling this [mental health issues] because this has become more relevant”
“... in this smaller community... if something happens to one of our kids, everybody is going to know about it... reaches a whole new slew of mental health issues... we're going to need that, we're going to need to know this stuff.”



Conclusions

- MHFA - USA Course
 - Improved confidence
 - How to refer, how to mediate, what to say, when to refer, who to refer to
 - Practicality
 - ATs have the knowledge, now have the resources/tools



Implications: Current, Certified, Practicing Athletic Trainers

- All become certified in Adult MHFA-USA course
 - Working with adult populations in clinical setting
- Model like CPR/First Aid certification requirements:
 - Every 2 years
 - Required to maintain certification with Board of Certification
 - Part of renewal process



Implications: AT Students in Master's Education Programs

- Incorporate into education programs
 - General Medical course
 - Psychology Course
- One-day certification course
- Required prior to completing Board of Certification exam
- Discuss Standard 77
 - Identify, refer, and give support to patients with behavioral health conditions. Work with other health care professionals to monitor these patients' treatments, compliance, progress, and readiness to participate.

