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Moral Distress And Ethical Preparedness In Athletic Training Students

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MORAL DISTRESS AND ETHICAL PREPAREDNESS IN ATHLETIC TRAINING STUDENTS

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ABSTRACT

Moral distress is prevalent in health care providers and can have long-term negative consequences on providers. There is currently no literature identifying if athletic training students experience moral distress or if these students feel prepared to deal with moral and ethical dilemmas in clinical practice. This study aimed to examine the frequency and perception of moral distress in athletic training students and evaluate athletic training students' ethical preparedness. This study used a concurrent mixed-methods design. 20 athletic training students in their final year of their professional master's program who had completed at least one 4-week clinical immersion rotation were recruited for this study (age: $M = 24.50$, $SD = 4.0$ years old, women = 17, men = 2, agender = 1). Using a web-based survey, participants completed the Measure of Moral Distress in Athletic Trainers (MMD-AT) and participated in a semi-structured interview to gather information about moral distress and ethical preparedness. Overall, participants did experience moral distress, albeit at a low level, with an average overall MMD-AT score of 23.80 ($SD = 24.50$) out of a maximum of 189 (range: 0–73). Qualitative analysis of the student interviews identified three domains: a) moral distress, b) dealing with distress, and c) educational preparation, with 11 categories that represented student responses. From these data, I created the Framework for Athletic Training Student Moral Distress Progression (the "Framework"). This Framework is a visual representation of the development, experience, and outcome of moral distress in athletic training students. The Framework is divided into three stages, each including potential interventions that educators could use to help mitigate the

development of moral distress in students. Moral distress is inevitable in health care, and through proactive and effective ethics education, athletic training students can develop the moral resilience they will need to effectively mitigate the negative outcomes of moral distress.

PREFACE

This dissertation is an original, unpublished work carried out in the Department of Teaching and Learning at Indiana State University between 2022 and 2023. The results are the work of myself, along with my committee members.

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George Matthew Adams said, “there is no such thing as a ‘self-made’ man.” We are all a combination of the kindness and support of those around us, and I have been fortunate to know many individuals that have gotten me to where I am today. I want to thank my family, especially my parents, Bill and Sherry Drescher, and my brothers, Brian and Will, for filling my heart with unconditional love and fostering an insatiable curiosity and love of learning that has made every experience in my life an opportunity for growth. I also want to give thanks to all of the friends I have made at ISU, especially Dr. Shannon Hamilton, Dr. Tara Armstrong, Dr. Thomas Greffly, Dr. Justin Young, and Dr. Jo Devenney, as your support, camaraderie, and love have kept the light in my heart bright. Finally, I want to thank my wife, Kendall, as without your support, love, and constant unwavering belief in me, I would have given up long ago.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

This chapter provides an overview of the moral nature of health care, the phenomenon of moral distress and moral disengagement, and the significance to the profession of athletic training and to athletic training education. Next, this chapter presents the purpose, guiding research questions, and significance of the study. Finally, this chapter outlines limitations and delimitations to this research.

Moral Distress, Disengagement, and Resiliency

Morals and ethics are typically used interchangeably. However, while their definitions are similar, there are some differences. Morals are the personal guiding principles and beliefs that govern an individual's actions in a given situation (Oxford University Press, n.d.b) While ethics has traditionally been viewed as the study of morals, it can also be defined as the general moral guidelines of a society (Oxford University Press, n.d.a). Simply put, morals guide how one person should act, and ethics suggest how individuals in a society or system should behave.

Some aspect of moral or ethical behavior exists in any profession where people work with others. In health care, however, such moral and ethical behavior not only guides how individuals work together but also influences the health and well-being of patients (De Panfilis et al., 2019). Due to this moral and ethical nature of providing health care to others, health care workers face moral or ethical dilemmas regularly (Allen et al., 2013). Every patient has their

own moral beliefs, which has strong implications on health care providers who face moral and ethical dilemmas regularly. As such, health care providers must be able to recognize the ethical and moral situations they may encounter in practice and to prepare themselves to face these challenges (De Panfilis et al., 2019). Due to the moral and ethical nature of providing health care to others, health care workers face moral or ethical dilemmas regularly (Allen et al., 2013). Further, increased strain on the health care system, coupled with higher demands placed on providers, has exacerbated the harmful stress of health care workers (Nejadsarvari et al., 2015). High levels of work-related stress associated with a lack of institutional support and strain on the system, such as understaffing or lack of collegiality, can lead to an increased incidence of moral distress in health care providers (Epstein & Hamric, 2009). Moral distress is defined as the negative psychological state caused when someone knows the right thing to do but, for some reason, cannot perform the action (Jameton, 1984; Morley et al., 2019). Moral distress is especially prevalent in health care due to the inherent moral and ethical implications of providing care to others. Multiple factors can contribute to increased moral distress, including lack of voice, institutional support, inter-team dynamics, and unequal power distributions within health care teams (Epstein et al., 2019; Lamiani et al., 2017; Pauly et al., 2012).

One factor that has recently contributed to increased moral distress is the increased demand for the health care system and the lack of resources caused by the COVID-19 pandemic (Cacchione, 2020; Spilg et al., 2022). This increased strain has been seen most notably in the moral distress experienced by nurses working within hospital intensive care units (Donkers et al., 2021). Increased levels of distress exacerbate already negative outcomes, such as burnout, absenteeism, and abandonment of the profession (Spilg et al., 2022). Researchers have already seen higher incidences of burnout and intent to leave a profession due to COVID-19 and its

impact on health care (Raso et al., 2021; Sharifi et al., 2021). In addition, increased levels of moral distress could also contribute to other negative factors that directly impact patient care outcomes, such as moral disengagement.

Moral disengagement, a term coined by Bandura, is the latent psychological phenomenon that occurs due to ethical or moral stress wherein the individual convinces themselves that ethical or moral standards do not apply to them (Bandura, 2002, 2014; Bandura et al., 1996). When an individual acts in a way against their moral belief or ethical standards, they can impose sanctions (either psychologically or societally) or morally disengage. Moral disengagement has eight distinct forms: (1) moral justification, (2) euphemistic labeling, (3) advantageous comparison, (4) displacement of responsibility, (5) diffusion of responsibility, (6) distortion of consequences, (7) dehumanization, and (8) attribution of blame (Bandura, 2002, 2016; Bandura et al., 1996). While each form is distinct, they all serve to reduce the negative feelings associated with a moral or ethical transgression (Bandura, 2002; Bandura et al., 1996). While no current research directly links moral distress to incidence of moral disengagement, the literature suggests that moral disengagement is caused by similar symptoms to moral distress, such as burnout and empathy fatigue (Brüggemann et al., 2019; Gini et al., 2020). These similar symptoms create a link between the two phenomena and helps to frame potential solutions.

The experiences of moral distress or moral disengagement alone are not inherent problems in health care. Instead, repeated exposure to moral distress without access to education, positive coping strategies, and support is the problem, as these repeated exposures without recourse can lead to increased levels of moral residue (Epstein & Hamric, 2009). Moral residue, or the cumulative effect of repeated and untreated incidences of moral distress, can cause burnout, empathy fatigue, adverse patient outcomes, and intent to leave the profession (Epstein

& Hamric, 2009; Ramos et al., 2016). In addition, without access to positive coping strategies, providers are at risk of resorting to negative coping to protect their psychological state, including moral disengagement. Moral disengagement can lead to other adverse patient outcomes due to health care workers not providing ethical care and not addressing their transgression (Dineen, 2012). The problem, therefore, is not that events occur, but that health care providers are not prepared to cope with the moral distress inevitable in their jobs and do not have the skills necessary to recognize potential moral disengagement in their practice.

Researchers have proposed solutions to the problem of moral distress, with one such solution being the development of moral resiliency within health care providers (Hancock et al., 2020; Lachman, 2016). Moral resiliency is an individual's ability to be exposed to moral distress or complexity and retain or rebuild their integrity (Rushton, 2016). Moral resiliency includes the ability to be exposed to morally distressing situations and cope with the adverse psychological effects in a way that mitigates the build-up of moral residue (Spilg et al., 2022; Young & Rushton, 2017). The development of moral resiliency has been shown to effectively reduce the perceptions and incidence of moral distress in nurses and health care workers, especially concerning the COVID-19 pandemic (Lachman, 2016; Spilg et al., 2022). However, moral resiliency is challenging to develop and may not be a complete solution to the problems caused by moral distress and moral disengagement (Rushton, 2016; L. Wocial et al., 2017).

Ethics education, specifically medical ethics education, is an effective tool to mitigate the effects of moral distress and cultivate moral resiliency (Grace et al., 2014; Kim & Park, 2019; Monteverde, 2016; Morley et al., 2021). In the reduction of moral distress and the development of moral resilience, successful ethics programs have used strategies that safely expose students to ambiguous ethical scenarios and give them practice and experience confronting these situations

before exposure to real-world events (Domen, 2016; Monteverde, 2016; Pinar & Peksoy, 2016). These programs have shown that ethics education can be an effective solution to mitigate the effects of moral distress and disengagement.

Importance to Athletic Training and Athletic Training Education

Athletic trainers are health care professionals that render services related to diagnosis, injury and illness prevention, and treatment in alignment with their education and training (National Athletic Trainers' Association, 2022b). Traditionally, athletic trainers are linked with sports and athletic endeavors. Still, the profession continues to grow and expand into other sectors, such as private medical practice, industrial, and performing arts (Board of Certification for the Athletic Trainer, 2022). Regardless of setting, many athletic trainers work in environments with high demands, little institutional support, and interpersonal conflict, all factors linked to increased incidences of moral distress and burnout (Cayton & Valovich McLeod, 2020; DeFreese & Mihalik, 2016).

The COVID-19 pandemic has also exacerbated these high work-related demands and lack of support. Early in the pandemic, athletic trainers were optimistic and showed some level of resilience and versatility in their practice (Winkelmann & Games, 2021). However, long-term exposure to the stress of operating with little support in a pandemic has shown different results, namely an increase in feelings of emotional exhaustion and depersonalization, all risk factors for burnout (Madden et al., 2022). Before the pandemic and its impact on the profession, athletic training was growing, albeit slowing down. Data from the Board of Certification for Athletic Trainers (BOC) show that in 5 years (2011–2016) the profession was growing year-over-year at an average rate of 4.7% (Board of Certification for the Athletic Trainer, 2021a). However, in the following 5-year period (2017-2021), the profession grew by 3.1% year-over-year (Board of

Certification for the Athletic Trainer, 2021a). Further, when comparing yearly certification data since 2011, the first incidence of a decline of athletic trainers in almost a decade occurred in 2020, right as the pandemic started, with a decrease of 0.5% (Board of Certification for the Athletic Trainer, 2021a). BOC data also indicates that 56,404 athletic trainers are currently certified as of June 2022, which is 3.4% lower than in June 2021 (n = 58,305; M. Lindquist, Personal Communication, June 28 2022). Similar to other health care workers, athletic trainers are experiencing symptoms of burnout that have been exacerbated by the COVID-19 pandemic (Cacchione, 2020; Cayton & Valovich McLeod, 2020; Oglesby et al., 2020). Therefore, the profession must implement strategies designed to mitigate the factors that cause burnout and intent to leave the profession, including moral distress and moral disengagement.

Moral distress, and subsequent feelings associated with burnout, contribute to the intent to leave a profession (Karakachian & Colbert, 2019). With the recent decline in the number of new and existing athletic trainers, it is imperative that the profession addresses burnout and moral distress in athletic trainers, as both play critical roles in workplace retention (Oglesby et al., 2020; Smallwood et al., 2021). However, addressing moral distress and disengagement is multifactorial (Epstein & Delgado, 2010). No single solution would work for every individual because moral distress is individualized (Young & Rushton, 2017).

Identifying situations that cause moral distress and moral residue before they occur is difficult, so solutions tend to focus on reactive rather than proactive action (Bennett & Eagan Chamberlin, 2013; Rushton, 2017). While institutions should continue to provide reactive solutions for health care workers experiencing burnout and moral distress, proactive solutions must be developed to decrease the incidence and cumulative effects of moral distress (Spilg et

al., 2022; Young & Rushton, 2017). Ethics education could be one potential proactive solution to the problem of moral distress and moral disengagement (Rushton, 2017).

Problem Statement

While preliminary data indicates that certified athletic trainers experience and perceive moral distress in their clinical practice, it is currently unknown if athletic training students experience or perceive moral distress during their education (Drescher & Eberman, 2022a). Current preliminary data on the implementation of ethics education within athletic training programs does not suggest that the instruction is in alignment with best practices for the development of moral resilience and the mitigation of moral distress (Drescher & Eberman, 2022b; Grady et al., 2008; Pinar & Peksoy, 2016). In addition, there is no literature examining the student experience of ethics education within athletic training programs and whether or not this education is effective.

Athletic trainers must pursue higher education before they are eligible to sit for the BOC certification exam and become athletic trainers. This education period could be an ideal time to instill medical ethical values within athletic training students and give them the skills necessary to address feelings of moral distress and moral disengagement (Monteverde, 2016; Young & Rushton, 2017). Ethics education has been found to be an effective method of developing moral resiliency (Monteverde, 2016). Implementing effective ethics education in athletic training would allow students to develop moral resiliency in a safe environment, aligning with current best practices regarding medical ethics education and training (Monteverde, 2014, 2016). Preliminary data suggest that early career athletic trainers (those with between six and ten years of experience) experience symptoms of burnout, such as depersonalization, at higher degrees than athletic trainers in other categories (Thomasen et al., 2022). Further, symptoms of

depersonalization and emotional exhaustion are exacerbated the longer a provider has been in a profession (Antonsdottir et al., 2022). Moral resilience has been shown to protect providers effectively from experiencing symptoms of burnout, especially depersonalization and emotional exhaustion.

Ethics education focused on developing moral resilience delivered before professional practice could help decrease feelings of burnout early in the career of an athletic trainer, potentially decreasing the incidence of moral residue accumulated over the course of a career. However, without foundational knowledge, implementation of interventions may prove difficult. A study focusing on athletic training students' experiences with moral distress in clinical practice and their perceptions of their programs' ethics education would provide foundational knowledge necessary to develop and study effective ethics education strategies.

Purpose Statement

This study aimed to examine the frequency of moral distress and perception of morally distressing events in athletic training students engaging in clinical practice. Further, this study examined the perceptions and beliefs of athletic training students regarding the occurrence and effectiveness of ethics education within their athletic training programs and their beliefs on their preparedness to address ethical situations in future clinical practice.

Research Questions

The following research questions guide this study:

1. To what extent do athletic training students experience moral distress within their clinical experiences as measured by the Measure of Moral Distress for Athletic Trainers?

2. To what degree do athletic training students perceive moral and ethical situations common in athletic training practice as morally distressing as measured by the Measure of Moral Distress for Athletic Trainers?
3. In what ways do athletic training students experience ethics education within their program?
4. In what ways do athletic training students perceive their ethics education is preparing them to address moral and ethical concerns in practice?

Significance

This research is the first study to investigate athletic training students' experiences with moral distress within their clinical practice. Previous studies that examined ethics education and experiences within athletic training students focused on the development of professional identity and professional values (Peer & Schlabach, 2009, 2011). However, while data suggest that the development of professional identity and values help guide the clinical practice of athletic trainers, no data indicate these interventions are effective in mitigating the effects of moral distress or the incidence of moral disengagement.

Further, there is currently no research regarding the perceptions of athletic training students on their experiences with ethical education or on the education's ability to prepare them for moral and ethical ambiguity within clinical practice. There is limited research surrounding the individual ethical beliefs of athletic training students, but no literature encompasses the perceptions of actual education (Caswell & Gould, 2008). These data suggest that athletic training students' personal moral beliefs should be considered when educating athletic training students about ethics, but it does not provide any insight into the effectiveness of current education.

As the number of athletic trainers starts to decline, along with the ever-present stress resulting from health care delivery within and following a pandemic, the profession must develop effective interventions to promote the vitality of the profession. This research helps to provide foundational information for athletic training education regarding ethics education and experiences of athletic training students. This information can be used to create effective ethics education strategies that address student experiences and concerns.

Limitations

There are some limitations to this study. Recruitment materials were focused on athletic training students, and program faculty were be asked to forward the recruitment email to all students. Recruitment of athletic training students through program faculty could have increase selection bias, as faculty may have chosen to forward this study only to students they thought best represented their program. To mitigate this limitation, programs were asked to send the recruitment materials to all potentially eligible students without imposing programmatic self-selection in the recruitment process. In addition, programs that do not do ethics education may not have chosen to forward the recruitment email to students. To moderate this, recruitment materials included information to assuage faculty concerns about not having explicit ethics education within their curriculum. Further, the information obtained in this study was self-reported, and those who agreed to a follow-up interview did so by self-selecting. In this particular study design, the data cannot be triangulated. Further, athletic training students are not allowed to practice autonomously, so the information gathered about their clinical experiences might be affected by their interactions with their preceptor and current clinical site.

Delimitations

To address these limitations, delimitations were imposed on this study. Delimitations are intentional decisions to adjust the inclusion and exclusion criteria to ensure the validity of the study. In this study, establishing a narrow inclusion criteria improved the internal validity of the study, but limited generalizability to those within criteria. Athletic training students were only eligible for the study if they had experienced at least four weeks of clinical immersion within their program. Clinical immersion in athletic training education is designed to provide students with a realistic experience of autonomous clinical care. Students who have experienced clinical immersion within their program allowed this study to gather the most authentic information regarding student clinical practice. The research team also engaged in a consensual qualitative research process to address researcher bias in qualitative data analysis. To ensure scientific rigor in this process, the research team employed member-checking, inductive coding analysis, multi-analyst triangulation, and external review of the results.

CHAPTER 2

LITERATURE REVIEW

This chapter covers the literature surrounding the concept of ethics and morals as they pertain to medical ethics. Further, this section reviews the literature concerning moral distress, moral disengagement, and moral resilience. Finally, this literature review discusses medical ethics education and how this education is presented within athletic training.

History of Ethics and Morals

Ethics and morals in humans have been studied since ancient Greek civilization. Socrates ruminated on ethics as the study of morals or the judgment of what is "good" and what is "bad." Throughout history, the concepts have been used interchangeably to describe the idea one might have about what is right versus what is wrong. However, more modern definitions have some differences.

Morals are the personal guiding principles and beliefs that govern an individual's actions in a given situation (Oxford University Press, n.d.-b). These beliefs are typically developed at a young age and change over time. Kohlberg studied this moral change when he created the Theory of Moral Development (Kohlberg & Hersh, 1977). Based heavily on Piaget's psychological development theories, Kohlberg conceived of three levels of moral development, each with two stages (Kohlberg, 1974). The first, the pre-conventional level, states that children respond to a society's beliefs of right and wrong but only understand based on the consequences.

Stage 1: Punishment and Obedience Orientation, is the embodiment of this principle: Children focus on whether something is good or bad based on the results (Kohlberg, 1974). Stage 2: Instrumental Relativist Orientation focuses on what actions serve the child's and sometimes others' needs. The pre-conventional level is highly driven by ego.

The second level, the conventional level, focuses more on interpersonal interaction. This level differs from the first because the child no longer worries about the consequences; doing right by others and society is rewarding in its own right (Kohlberg, 1974). Stage 3: Interpersonal Concordance focuses on the belief that something is good if it helps others and is approved by others. Stage 4: Law and Order Orientation focuses on following rules and respecting authority figures as the guidelines of what is right and wrong and maintaining the status quo.

The third level is the post-conventional level or the autonomous or principled level. At this level, individuals start to understand and define their morals in a manner separate from external entities, such as peers or authority (Kohlberg, 1974). Stage 5: Social-Contract Legalistic Orientation focuses on developing an idea of right and wrong based on individual rights and standards created by society or a society's ethical principles. Stage 6: Universal-Ethical-Principle Orientation is the stage where an individual defines the concepts of good and evil based on self-chosen ethical principles. These principles are typically abstract and not based on definite rules for specific actions. As the post-conventional level is the latest level of development, it would make sense to contextualize adult ethical behavior into this final level. However, critics have found flaws in the simplicity and explanation of this moral development.

In each of Kohlberg's stages, he focused on how humans develop from self-centered to person-centered to universe-centered in their moral beliefs (Kohlberg & Hersh, 1977). However, Kohlberg's theory does not discuss the "what" and "where" concerning how these beliefs form

(Moheghi et al., 2020). The context in which a person lives significantly dictates their moral beliefs as they grow (Miller, 2013). Research reviewing Kohlberg's and others' theories on moral development illustrates that, while some moral ideas are inherent, such as the concept of justice, the context in which the concept is defined varies and is widely influenced by culture. By studying the ethical climate one inhabits, one can more clearly define the meaning and understanding of moral concepts in practice. Further, Kohlberg's theory focused on male subjects in a western context (Moheghi et al., 2020). This narrow view severely limits the generalizability of the concepts laid out within the approach to a more modern and global society.

While ethics has traditionally been viewed as the study of morals, it can also be defined as the general moral guidelines of a society (Oxford University Press, n.d.-a). As an example, morals guide how one person should act, and ethics suggest how individuals in a society or system should behave. Understanding the concept of morals is critical, as the culture, societal norms, and geography of one's environment can significantly affect the ethical standards influencing their behavior (Miller, 2013). A recent systematic review examined cross-cultural ethical issues within the business sector (Ermasova, 2021). The purpose of the review was to gain a deeper understanding of cross-cultural ethical issues and to fill in a gap within the literature surrounding business ethics. The author used a systematic review process following best practices (Snyder, 2019). The author found a final sample of 306 studies related to cross-cultural business ethics published in the last 35 years (Ermasova, 2021). The authors found that a strong ethical climate in business can create a shared belief, but large ethical differences exist across cultures. This gap could make it difficult for companies that span multiple regions to develop a strong ethical foundation. Further, ethical actions, such as whistleblowing, and the

beliefs surrounding them are heavily influenced by culture. This systematic review helps to illustrate the concept that ethics are influenced by a person's culture and environment. When approaching ethical issues in any environment, it is critical that the sociocultural influences of the situation are examined and taken into consideration.

Cross-cultural ethics in business is crucial due to the necessity of frequent interpersonal interactions in the global economy. However, business is not the only profession that requires interpersonal interactions with individuals of different cultural and contextual backgrounds. One profession that requires such interactions is health care.

Medical Ethics

To understand the complexity of ethics within health care, we must understand the general ethical principles that guide medical practitioners. The Hippocratic Oath sets a general stage for medical ethics and professionalism (Elliott et al., 2009). However, there are many nuances and complexities involved in patient care, and this maxim may not completely suffice. The modern understanding of medical ethics and professionalism can trace its origins to the publication of the book *Medical Ethics* by Thomas Percival in 1803 (Percival, 1803). In this book, Percival outlined the ethical duties of physicians to the patient. This book became one of the foundations for the American Medical Association's code of ethics, published in 1847 (Beauchamp & Childress, 2001). Beauchamp and Childress (2001) went on to expand the concept of medical ethics and develop four principles of medical ethics, the core pillars upon which modern medical ethics stand. The first of these pillars is autonomy. Autonomy is the concept that patients have the right to influence their medical care decisions independently. The second and third pillars are nonmaleficence, or doing no harm, and beneficence, or actively working to prevent harm and provide benefit to patients. The final pillar, justice, focuses on the

fair distribution of care, risk, and benefits. Elliot expounded on this principle and included the idea of social justice, or the equitable care for all people regardless of socioeconomic status, race, sexual orientation, or gender identity (Elliott et al., 2009). These principles serve as the foundation for ethical medical practice, and they should act as guidelines to help clinicians provide ethical care. Even so, these principles may not be enough for all situations in a globalized world. These beliefs are deeply rooted in Western philosophy and the development of western medicine (Genuis & Lipp, 2013). To truthfully live up to the standards of autonomy, beneficence, nonmaleficence, and justice in a globalized world, health care providers must be able to make complex ethical decisions concerning their and their patient's moral beliefs, needs of the health care team, and even needs of their organization.

Further, there is a general risk of ethical concerns in health care due to the nature of the profession. These ethical concerns are typically not answerable with traditional scientific knowledge, facts, or general ethical guidelines (Bandman & Bandman, 1990). In addition, modern medicine and advancements in medical technology can also create complex medical issues for health care providers (Lakhan et al., 2009). It is then essential for health care providers to understand their own beliefs and the ethical standards they should be following. Health care providers typically have either standards of professional practice or a code of ethics that help guide providers' actions (Desai & Kapadia, 2022). Within athletic training, for example, there are both standards of professional practice and a code of ethics to guide professional practice (Board of Certification for the Athletic Trainer, 2021b; National Athletic Trainers' Association, 2022a). When there is a disconnect between a provider's beliefs and the appropriate action as dictated by such ethical standards, however, adverse effects can occur (Kalvemark et al., 2004). One of these adverse effects is moral distress.

Moral Distress

Changes in health care have caused more significant amounts of stress on providers (Lamiani et al., 2017; Monteverde, 2016). Increased demand and availability of health care, while beneficial to the patient, have been shown to cause increased pressure on physicians. Much of the stress placed on health care providers are either institutional or psychological (Epstein et al., 2019; Kalvemark et al., 2004). Institutional factors include lack of support, lack of compensation, and increased demands placed by employers, whereas psychological factors include increased workloads, lack of directions, and burnout associated with work. Ethical dilemmas within health care can also cause psychological stress. Further, stress related to ethical dilemmas can exacerbate and compound issues already experienced in the workplace. Stress induced by ethical dilemmas is called moral distress (Kalvemark et al., 2004).

Moral distress, a term originally coined by Jameton in his research on nursing, is defined as the negative psychological state that occurs when an individual knows the right thing to do but for some reason is unable to do it due to constraints outside of the individual's control (Epstein & Delgado, 2010; Jameton, 1984; Kalvemark et al., 2004; Pauly et al., 2012). While the concept of stress related to moral imperatives has existed in medicine, moral distress has focused the literature on examining the harmful psychological effect of this stress. Specifically, moral distress occurs due to ethical dilemmas that directly conflict with the providers' moral beliefs or values. Moral distress is not explicitly confined to medicine or health care, but the ethical nature of health care facilitates a higher likelihood of moral distress in health care providers (Allen et al., 2013; De Panfilis et al., 2019).

Initially, the concept of moral distress surrounded the idea of an individual not being able to perform an action they deemed morally correct (Jameton, 1984). A recent literature systematic

review by Lamiani et al. (2017) sought to review the literature on moral distress to map its study over time and to analyze any relationship between moral distress and other concepts in health care. The authors did a bibliometric review of all literature on moral distress published since Jameton's coining of the term in 1984. Due to the specific nature of the concept, the authors only searched for the term "moral distress" within the title of the manuscripts. Seventeen articles were included for analysis; over 52% of all articles were published between 2011 and 2013 and 70% of publications came from North America. These publication numbers illustrate a more modern and western interest in the topic within the literature. Most of the publications also focused on health care settings that are more likely to cause ethical dilemmas, such as critical care and emergency medicine, and most of the publications focused on nursing. The authors found that both organizational and psychological factors can correlate to moral distress in health care providers and that, despite using varying methods of measuring moral distress, most of the studies included in the review were coherent with each other regarding related factors.

Organizational factors included poor ethical climate, lack of support from peers or supervisors, and poor collaboration or team environments between providers. Patient caseload also correlated with moral distress, with both high and low caseloads related to increased moral distress. This finding may be due to contact frequency in high caseload units, which increase the chance of moral distress occurring per patient (Lamiani et al., 2017). In contrast, other research suggests that low caseload as a predictor of moral distress may be related to setting; low caseload wards or units are typically acute-care units where a large proportion of decision-making is ethical in nature (Hamaideh, 2014). High caseload units typically receive more stable patients for long-term monitoring, which may reduce the ethical decision-making necessary and therefore the likelihood of moral distress. The authors also found that moral distress was associated with

burnout. Specifically, it was linked to intent to leave the profession and dissatisfaction with one's job (Lamiani et al., 2017). This association has also been found in other studies, suggesting a strong relationship between moral distress and burnout (Epstein et al., 2019).

Lamiani et al. al (2017) so found psychological factors were correlated to moral distress, including lack of structural and psychological empowerment, low levels of autonomy, and low access to resources for mental health. Unlike organizational factors, however, psychological factors were more likely to predict levels of moral distress after a distressing event rather than a primary cause of the distress itself. Further, poor psychological conditions were more likely to exacerbate the effects of moral distress in health care providers. This systematic review illustrated the need for health care organizations to invest in the intangible aspects of work, such as feelings of autonomy and work engagement, to provide better work life for providers.

The amount of research being generated surrounding moral distress has caused some confusion within the literature as to the concept and clarity of the idea. A recent systematic review and narrative synthesis of the literature sought to analyze current key definitions of moral distress and to consider components that are either necessary or sufficient for moral distress (Morley et al., 2019). Morley et al. (2019) focused on the philosophical concept of necessary and sufficient language to develop a conceptual definition of moral distress as described by Mackie (1965). After a literature search, the authors identified 152 studies. However, only 34 studies were included in the narrative synthesis (Morley et al., 2019). The authors found 20 key definitions within the literature and synthesized these definitions into conditions that may cause moral distress. These conditions include moral judgments, psychological and physical effects, moral dilemmas, moral uncertainty, constraints, and threats to moral integrity.

Moral judgment did not seem to be a necessary or sufficient concept for moral distress (Morley et al., 2019). Jameton's (1984) original definition focused on the concept that a provider had already made a moral judgment; therefore, they knew the right thing to do, and moral distress occurred when they could not act on this idea. However, other literature supported that providers did not need to know the answer, only understanding that they were uncertain about a moral dilemma to experience moral distress (Morley et al., 2019). Further, Morley et al. (2019) found that experiencing a morally distressing event was necessary or sufficient for moral distress to develop. However, the definition of what constitutes an experience, or what the experience is, is not important to the development of moral distress, as was the definition of moral dilemmas or uncertainty.

The psychological response was deemed to be necessary or sufficient for moral distress; however, the exact psychological response is not as important. Constraints were also found not to be necessary or sufficient for moral distress to occur. Within the literature, it was unclear whether internal or external constraints were required for moral distress to occur (Morley et al., 2019). Some literature supported the idea that constraints limited providers' moral agency, which could lead to moral distress. Yet, the authors found that these constraints were not the sole causes of limited moral agency, so they could not be considered necessary for moral distress. The concept of constraints alone supposed that one could not develop moral distress without them, creating an exclusive definition that does not incorporate much of the literature surrounding moral distress. Based on this literature review and narrative analysis, Morley et al. (2019) concluded that, for moral distress to occur, there must be an experience of a moral event, and experience of psychological distress, and a causal link or relationship between these two

experiences to cause moral distress. This definition is both broad enough to encompass a variety of different situations while giving a more supported framework to the nature of moral distress.

Encompassed within Morley et al.'s (2019) framework for moral distress are five key components: lack of voice, complicity in wrongdoing, wrongdoing associated with professional values, repeated experiences of morally distressing situations, and either patient, unit, or systems-level issues (Epstein et al., 2019; Hamric, 2014; McCarthy & Monteverde, 2018; Morley et al., 2019). These components are directly related to the psychological effects necessary to cause moral distress, but they are not mutually exclusive. Any one or combination of the components could result in moral distress. While the definition and components of moral distress were developed focusing on nursing, these concepts can be extrapolated to examine moral distress in other disciplines, even if the literature is lacking.

Unlike within the nursing literature, research surrounding moral distress in athletic trainers is nonexistent. Limited data exists that directly examine moral distress in athletic trainers (Drescher & Eberman, 2022a). However, research has focused on the effects of moral distress in professions similar to athletic training, namely in physical and occupational therapy (Carpenter, 2010; Rivard & Brown, 2019). Physical therapists experience many of the same factors that result in moral distress as other health care professionals (Carpenter, 2010). Occupational therapists also experience moral distress. Research indicates that many of the issues resulting from this distress can also be traced back to core critical components (Morley et al., 2019; Rivard & Brown, 2019). While there is not definitive research in athletic training, it can be assumed that athletic trainers also experience moral distress from similar situations as other health care professionals.

Recently, a tool was developed to measure moral distress levels in health care providers. The Measure of Moral Distress for Health Care Professionals (MMD-HP) was developed by Epstein et al. (2019)to measure both the prevalence and perceived distress caused by various situations that could occur in a health care space (also see Hamric et al., 2012). Epstein et al., unlike others studied, used a myriad of health care professionals to validate the tools for multiple providers, including physicians, nurses, physical therapists, occupational therapists, and pharmacists. The tool was found to be valid in all of these professions. As mentioned previously, because this tool was validated in disciplines close to athletic training, this tool could be used to measure moral distress within athletic trainers.

However, while similar to occupational and physical therapy, athletic training also has unique aspects that could potentially increase the risk of morally distressing situations. Many of the items on the MMD-HP were developed with a focus on intra-hospital or intra-clinical care. However, many athletic trainers work outside of a hospital setting, and their athletic training facilities are frequently not integrated into the larger hospital space (Board of Certification for the Athletic Trainer, 2022). In addition, athletic trainers typically work closely with stakeholders outside the health care sphere, such as coaches, parents, and administration members (Pike Lacy, Bowman et al., 2020). These stakeholders can pressure athletic trainers to make decisions in their best interest rather than the patient's, further exacerbating moral dilemmas and potentially causing more moral distress (Pike Lacy, Singe et al., 2020). Due to these more unique aspects of athletic training, a modification of the MMD-HP was needed to assess the prevalence of moral distress in athletic trainers accurately.

The Measure of Moral Distress in Athletic Trainers (MMD-AT) was developed to address the aforementioned concerns (Drescher & Eberman, 2022c). Researchers modified the

situational prompts within the MMD-HP and used a panel of experts to perform a content validation index (CVI) review. During this review, items were modified for clarity, relevance, and some items were removed due to irrelevance to the profession. After the panel reached consensus, a CVI was calculated and the tool was deemed to be valid as a measure of moral distress in athletic trainers. This tool can be used to assess both prevalence of morally distressing situations and perceived levels of moral distress caused by these situations. Further, because the tool has a focus on clinical practice rather than level of clinical experience, this should also apply to students engaged in immersive clinical experiences. In the future, this tool can be used to assess an individual's level of moral distress and provide resources to help them reduce the negative effects.

Moral distress can have many negative effects on health care providers, and these effects can have drastic impacts on providers and patients within health care. Burnout, feelings of frustration and helplessness, and intent to leave the profession can occur as a result of moral distress. These feelings and effects can have negative impacts on patient care delivery and the effectiveness of health care providers (Epstein et al., 2019; Epstein & Delgado, 2010; Zuzelo, 2007). While much of the literature surrounding moral distress attempts to better define the phenomenon and its repercussions, research has also focused on the actions and responses caused by moral distress. Repeated episodes of moral distress has been shown to lead to moral residue, the lasting psychological effects of repeated exposure to moral distress, and the proliferation of negative coping strategies (Epstein & Hamric, 2009). One of these coping strategies is moral disengagement.

Moral Disengagement

Moral disengagement is a latent psychological process in which an individual undergoing some form of moral or ethical stress convinces themselves that the ethical standards of a situation do not apply to them (Bandura, 2014). Originally developed by Bandura and based in his social cognitive theory, the concept of moral disengagement surrounds the idea that it is both a moderator and mediator of morally ambiguous situations (Bandura, 2014; Moore, 2015). Simply put, moral disengagement acts as a defense mechanism within the brain to alleviate cognitive dissonance related to ones actions when they do not align with one's moral beliefs or society's ethical norms.

There are eight components of moral disengagement, including moral justification, euphemistic labeling, advantageous comparison, displacement of responsibility, diffusion of responsibility, distortion of consequences, dehumanization, and attribution of blame (Bandura, 2014, 2016). Each of these components can act as a mechanism to eliminate the constraints imposed by one's moral or ethical environment, further serving to protect the psychological safety of the individual from consequences resulting from morally deviant actions (Bandura, 2014).

Just as moral distress is prevalent in health care, so too is moral disengagement. One of the issues with studying moral disengagement in health care is the implicit need to admit to or identify wrongdoing. For many professions, the implications of this are minimal. However, in health care, admitting to the responsibility of actions outside of the ethics of the profession can have a serious negative impact on a provider (Lane & Roberts, 2021). Even so, research has been able to focus on moral disengagement in health care based on specific factors already examined within the field.

One of the factors that research has indicated as a contributor to moral disengagement in health care is turnover intention, or intent to leave the profession or organization (Christian & Ellis, 2014). Individuals who intend to leave an organization or profession have effectively removed the implicit relationship governing their actions and decisions. In turn, they are more likely to morally disengage and perform actions that they would otherwise be concerned with facing repercussions. As intent to leave a profession is a common result of increased moral distress, this creates a link between the experience of moral distress and moral disengagement within health care (Dzeng & Wachter, 2020; Karakachian & Colbert, 2019). However, this does not explain the incidence of moral disengagement in providers who do not intend to leave their profession or organization.

As with moral distress, much of the research surrounding moral disengagement in health care has been focused in nursing. Literature has shown that nurses experience moral disengagement and resort to using this disengagement to get around the moral and ethical obligations of their practice (Fida et al., 2018). Further research has linked such disengagement to external pressures placed on nurses within the health care system, including workplace aggression and subsequent negative emotions (Fida et al., 2018). The fact that nurses participate in moral disengagement is not surprising due to the known levels of moral distress they experience. More research has shown that this distress and disengagement can lead to barriers that exacerbate other psychological phenomena within providers, and this can be related to indirect patient care as well.

Literature examining the bystander effect, or the seemingly contradictory passivity of bystanders observing a negative situation, has found that individuals affected by bystander passivity are usually experiencing some form of moral distress due to the situation (Brüggemann

et al., 2019; Gini et al., 2020). They subsequently rationalize their inaction with some form of excuse, thereby morally disengaging from their inaction and reducing adverse psychological effects (Brüggemann et al., 2019; Gini et al., 2020). Within health care, research has indicated that providers who witness a morally distressing event and do not intervene or act experience a high level of shame and guilt (Wijma et al., 2016). This shame and guilt seem to indicate that the providers are feeling some form of moral distress, and their inability to act is rationalized by morally disengaging from the situation. Providers who were confronted with claims of patient abuse frequently explained the situation in ways that indicated diffusion and displacement of responsibility, further illustrating moral disengagement in health care (Swahnberg & Wijma, 2011). It seems that moral disengagement can occur in both direct and indirect patient care. Further research is needed to examine the prevalence and impact of moral disengagement in a variety of health care providers.

While not widely studied within athletic training currently, moral disengagement has been studied in a close counterpart to the profession–sport. Athletes have been shown to engage in moral disengagement during sporting endeavors to allow themselves to perform morally reprehensible actions without psychological damage. Athletes have been found to use all seven of the components of moral disengagement, including dehumanization, distortion of consequences, and diffusion or displacement of responsibility (Corrion et al., 2009). Much of the literature surrounding this phenomenon is dedicated to both the understanding of the cause and the prediction of the behavior. Research focused on the causes of moral disengagement in sport found that external pressures, low moral identity, and an external locus of control contributed to the performance of moral disengagement as a result of a moral transgression (Kavussanu & Ring, 2017; Tsai et al., 2014).

Research focused on the prediction of moral disengagement found that athletes are more likely to disengage morally in sport if they are male, have low perceptual moral attentiveness in sport, and subscribe to war-contestation orientation in sport (Shields et al., 2015). Perceptual moral attentiveness is the ability to understand morally ambiguous situations in real-time. Low levels of this attentiveness in sports indicate an inability to identify actions that would be morally reprehensible, increasing the likelihood of moral transgression. War-contestation orientation is the tendency for one to liken competition to war, where the opponent is an enemy, and therefore all actions are justified in defeating the enemy. It does not have to be stated how this could increase the likelihood of moral transgression against an opponent. These factors play an important role in understanding the phenomenon of moral disengagement, and mitigation strategies should focus on alleviating the predictors and causes within athletes.

These predicting factors may also allow researchers to study moral disengagement in other professions. A recent study sought to examine what factors predicted the moral disengagement of athletic trainers. Due to the closeness that the profession has with sport, the authors focused their review to factors that have been shown to cause athletes to morally disengage (Budziszewski et al., 2020). The study found that moral disengagement can be predicted by four factors: sport-ethic conformity, war-like contestation orientation, low patient commitment, and low social identity to the team with whom they work. This study had major implications to the profession of athletic training, as a study of this type has not been performed in the profession. Further, the authors indicated that they received negative backlash from athletic trainers at their institution for even attempting to study this phenomenon (R. Budziszewski, personal communication, October 26, 2020). The predicting factors are described below, and their implications are discussed.

Conformity to sport-ethic is the belief in the norms implicit in a sporting environment (Hughes & Coakley, 1991). These norms, while positive in nature, can encourage deviant behaviors for the good of the game and the team. Athletic trainers who subscribe to this sport-ethic would therefore be more likely to sacrifice patient wellbeing for the good of the team or the game in question. Further, due to the all-or-none nature of the tenets of sport-ethic, athletic trainers may be inclined to supersede their professional code of ethics with these norms, causing them to act outside of their professional boundaries.

As stated previously, war-like contestation orientation is the belief that competition is like war, and the opponent should be seen as the enemy. Such a view of competition, in turn, grants perceived permission to win at all costs (Budziszewski et al., 2020; Shields et al., 2015). Athletic trainers with war-like contestation orientation may be more inclined to ignore the injury or act outside of the patient's best interests to contribute to winning the game (Budziszewski et al., 2020). Additionally, athletic trainers subscribing to war-like contestation orientation may be encouraged to support unsafe sports behaviors or ignore safety issues within the athletic activity in the name of team success. Low patient commitment has obvious negative consequences for patient care. Regarding moral disengagement, athletic trainers with low patient commitment are more likely not to view patients as people rather than just athletes. When faced with a morally distressing situation, the athletic trainer is more likely to dehumanize the patient and justify poor patient care decisions based on this moral disengagement.

Low commitment to the team, in many ways, seems contradictory. Since athletic trainers who subscribe to sport-ethic and war-like contestation orientation are more likely to disengage in morally distressing situations, it would seem beneficial to decrease the commitment that the athletic trainer has to the team (Budziszewski et al., 2020). However, authors also found that

low commitment to a team made it easier for athletic trainers to disengage when faced with a moral dilemma, seeming to be due to the athletic trainer not identifying that the team's well-being is essential. By creating a commitment to the team, athletic trainers are more likely to make decisions that benefit the patient, as they are more likely to identify that such choices are also beneficial to the group. If athletic trainers have low commitment, they are likely to see their decisions as not essential and, therefore, morally disengage without repercussion.

All of these factors, and the subsequent moral disengagement, have negative medical ramifications for the patient and legal consequences for the team, organization, and athletic trainer. It is essential, therefore, that athletic trainers develop coping strategies that help to reduce the likelihood of moral disengagement. Further, organizations must develop strategies to mitigate the underlying catalysts for moral disengagement, namely moral distress. The potential negative impact of moral distress and moral disengagement on providers and patients warrants the implementation of strategies focused on mitigating the causes of moral distress.

Moral Resilience

Research has focused on the development of moral sensitivity and resilience in health care providers (Ohnishi et al., 2019). Moral sensitivity is the ability of an individual to identify or recognize a situation as having moral implications (Nejadsarvari et al., 2015). However, there has been some dissent about the effectiveness of moral sensitivity training. High levels of moral sensitivity, while decreasing the experiences of moral distress, can significantly increase the intensity of moral distress and moral residue when providers cannot change their practice. Therefore, rather than focusing on health care providers' moral sensitivity, organizations should put effort into developing moral resilience in clinicians.

Much of the research concerning moral distress has focused on its negative effects on clinicians and individuals, and very little research has focused on attainable solutions to the problem (Rushton, 2017; Young & Rushton, 2017). However, one strategy suggested to help mitigate the effects of moral distress sustainably is the development of moral resilience. Moral resilience is the concept of developing the psychological ability to reduce the adverse impact of morally distressing events (Lachman, 2016; Rushton, 2017). Building psychological strategies and methods for mitigating the negative effects of moral distress can have positive impacts, including decreased perceptions of moral distress and decreased levels of moral residue, the ability to more effectively navigate morally and ethically ambiguous situations, and the capability to hold true to one's values in the face of moral stress (Lachman, 2016; Young & Rushton, 2017). Multiple strategies have been used to develop higher levels of moral resilience with varying levels of success (Stutzer & Bylone, 2018). However, some key antecedents contribute to the development of moral resilience, as shown in the literature.

Education surrounding ethics and knowledge of ethical norms can help clinicians develop moral resilience (Young & Rushton, 2017). Specifically, the ability to frame an ambiguous ethical situation into a known pattern of understanding can help clinicians navigate the complex path forward. Further, the ability to identify diverse core values and make meaning in one's life are also factors that can lead to the development of moral resilience (Rushton, 2017; Young & Rushton, 2017). Through ethics education, students can be taught to identify ethical scenarios, identify the values involved, and make meaning from the moral situation to develop a path forward without negative moral effects (Rushton, 2017).

Research has shown that exposure to morally distressing situations alone can help develop moral resiliency (Monteverde, 2014; Young & Rushton, 2017). The exposure to the

situation itself allows clinicians to practice and develop the skills related to moral resilience (Young & Rushton, 2017). Indeed, repeated exposure and training of moral resilience have led to decreased perceptions of moral distress (Monteverde, 2016). While it seems paradoxical, the increased exposure to moral distress and the decreased perception of moral distress indicate the development of moral resiliency (Monteverde, 2016; Young & Rushton, 2017). Exposing students to morally distressing scenarios in an educational environment could have these same effects while mitigating the risk of genuine harm or negative effects, expediting the development of moral resilience.

One of the more interesting factors in the development of moral resilience is the skill of using a large vocabulary to describe situations, emotions, and feelings (Rushton, 2017; Young & Rushton, 2017). Consistent negative narratives associated with the experience of moral distress can cause worsening of feelings experienced due to the distress (Rushton, 2017). The ability for an individual to more accurately describe their emotions and use positive language to narrate their experiences can increase the likelihood of developing moral resilience (Rushton, 2017; Young & Rushton, 2017).

The complete elimination of moral distress is unlikely in health care, and there is a need to develop strategies to mitigate its effects (Rushton, 2017). The literature indicates that moral resilience could be an effective method to develop mitigation strategies in health care providers in a way that would not only benefit them in the short term but sustainably last for the long term (Hancock et al., 2020; Lachman, 2016). However, the cultivation of moral resilience as a skill still lacks research support (Wocial, 2020). Still, health care ethics education has been shown to be an effective way to introduce the concept of moral resiliency and give students the skills needed to develop moral resiliency gradually and safely (Monteverde, 2016).

Medical Ethics Education

The development of medical ethics education has focused on creating clinicians that adhere to medical ethical standards (Fox et al., 1995). Health care is an ethical and moral profession, and providers will, at some point in their careers, experience a situation that challenges their morals and values (Allen et al., 2013; Gastmans et al., 1998). Therefore, education must focus on giving clinicians the skills necessary to navigate this moral and ethical landscape to provide high-quality patient care.

While ethics education has been formally incorporated into medical education since the 1970s, a review of the literature showed there is still a lack of information about key aspects of ethics education in medicine, including theoretical frameworks, strategies for teaching medical ethics, and future implications of creating virtuous health care providers (Eckles et al., 2005). Still, even without such aspects discretely illustrated in the literature, an effective strategy for medical ethics education can be extrapolated to create a more well-rounded curriculum. More recently, a scoping review of undergraduate medical ethics education from 1990 to 2020 examined how medical programs were teaching ethics (Wong et al., 2022). The authors reviewed 160 ethics teaching and assessment articles in medical education. In addition, the authors conducted multiple scoping reviews focusing on ethics teaching strategies and assessment of ethics education. These reviews identified several strategies that should be considered best practice for medical ethics education, including interprofessional, team teaching approaches, and a staged-based approach to assessment rather than a final, summative assessment strategy.

Wong et al. (2022) also found that ethics education should be integrated into existing curricula to create a context for students rather than delivering the education in a stand-alone class or module. Many studies seem to support ethics content integration into current curricula; a

meta-analysis on ethics training in the sciences demonstrated that teaching general ethical principles as independent concepts is not as effective as profession-specific training (Watts et al., 2017). However, other literature shows that teaching information that is too specific to one's particular setting might not give the space to make more generalizable decisions (Mulhearn et al., 2017). While there is nuance in the decision of where to place ethics education within a curriculum, it is clear that direct, specific, and relevant education is effective for teaching ethics (Mulhearn et al., 2017; Watts et al., 2017).

Ethics Education in Athletic Training

There is limited literature surrounding ethics education in athletic training. Much of the literature focuses on assessing student ethical performance based on the core athletic training competencies (Cavallario et al., 2018). In addition, current literature on the ethical development of athletic training students focuses on developing professional values in students (Peer & Schlabach, 2009). While this literature contributes to the work surrounding ethics education, it does not necessarily create a framework to address issues and barriers within athletic training education.

One factor to consider when evaluating effective ethics education is whether or not the education has developed student professional dispositions. Dispositions are the values, behaviors, and beliefs that one needs to become a competent and effective professional in a discipline (Spurgeon et al., 2012). Disposition is critical in ethics education, as ethical behavior is, in part, derived from student dispositions (Brown et al., 2010). However, there is limited literature surrounding the evaluation of disposition in health care providers, and there is no literature about the development of student disposition in athletic training. Further, the Board of Certification for the Athletic Trainer (BOC) Practice Analysis, the document from which the

certification exam is developed, does not focus on the development or assessment of professional dispositions (Board of Certification for the Athletic Trainer, 2022). Student disposition must be taken into consideration in the development of ethical health care providers.

The Commission on Accreditation of Athletic Training Education (CAATE) standards that currently apply to athletic training education do include expectations regarding ethical education and professional practice expectations for athletic training students. Specifically, Standard 65 states that athletic training programs should ensure that graduates "practice in a manner that is congruent with the ethical standards of the profession" (CAATE, 2022a, p. 53). While the most updated standards are much more prescriptive in addressing each standard, they are vague and do not provide a framework for how a program should measure ethical practice by design. The CAATE standards are written in a way that conveys competency benchmarks while still allowing athletic training programs to retain instructional autonomy (L. Eberman, personal communication, 2022).

One study sought to develop a concrete ethical framework within athletic training to help support the delivery of ethics education in athletic training. As a result, this research has established ethics education guidelines for athletic training programs (Cullen, 2017). This framework suggests approaches and learning objectives related to necessary ethical skills that athletic trainers should have upon graduation. However, these guidelines are vague at best and incorporate language that is difficult to measure in an educational setting, such as a student's understanding of the professional responsibilities of an athletic trainer. Further, these guidelines do not seem to be wholly adopted within athletic training programs, as indicated by preliminary data surrounding the implementation of ethics education within athletic training programs (CAATE, 2022b; Drescher & Eberman, 2022b).

Currently, none of the proposed implementation strategies for ethics education within athletic training are well supported by empirical data. Further, the lack of sound pedagogical approaches in implementing ethics education makes it more challenging to assess ethical practice. Coupled with the difficulty in developing and assessing student dispositions, it is possible that students can complete the necessary coursework and assessments to graduate and still be unable to act in an ethical manner. Without in-depth solutions to the implementation and evaluation of ethics education in athletic training, the profession will continue to struggle in addressing the issues surrounding moral and ethical action. While the literature does not give much information in this implementation, review of instructional and curricular theory and pedagogical frameworks might give athletic training educators a more sturdy foundation.

Summary

The concepts of morals and ethics have existed for a majority of written human history. In health care, ethics and morals play a large role in the daily clinical practice of clinicians. By nature of the profession, health care workers are exposed to morally distressing situations on a regular basis. Without the proper skills to mitigate the negative effects of moral distress, providers are at risk to morally disengage from clinical practice and develop moral residue. Education on ethical principles and training to develop moral resilience could help health care providers, such as athletic trainers, mitigate the effects of moral distress within their practice. While some professions, such as nursing, have researched strategies to mitigate moral distress, there is limited research within athletic training surrounding ethics education or moral distress.

CHAPTER 3

METHODS

This chapter focuses on the methods of this research proposal. Within this chapter, the purpose of the research, the research design, and the research questions is discussed. Further, the setting, participants and instrumentations is detailed. Finally, the data collection and analysis processes is described, and a summary of the process is outlined.

Purpose Statement

This study examined the frequency of moral distress and perception of morally distressing events in athletic training students currently engaging in clinical practice as part of their formal clinical education. Further, this study examined the perceptions and beliefs of athletic training students regarding the occurrence and effectiveness of ethics education within their athletic training programs and their beliefs about their preparedness to address ethical situations in future clinical practice. Considering the data gap within athletic training education literature, this study provided necessary foundational knowledge and assessment of student perceptions that can help guide future interventions in athletic training education.

Research Design

This study used a concurrent mixed-methods design to study both the experiences and perceptions of moral distress as well as the effectiveness of current ethics education of athletic training students. Measurement of moral distress occurred through a validated tool designed to

measure experiences and perceptions of moral distress within athletic trainers (Drescher & Eberman, 2022c). While this tool has been shown to be effective in the measurement of both experiences and perceptions of moral distress, it is unable to capture lived experiences of moral distress or participant perceptions of preparation to deal with moral distress. To measure such lived experiences, data was collected through semi-structured interviews via a video conferencing platform. The interview script was developed from related exemplar research and reviewed by experts in the field of phenomenology and qualitative interview design. This design is well supported in the literature as a method to research and collect information regarding lived experiences and perceptions of athletic trainers (Grimes et al., 2021).

Research Questions

The following research questions guide the study:

1. To what extent do athletic training students experience moral distress within their clinical experiences as measured by the Measure of Moral Distress for Athletic Trainers?
2. To what degree do athletic training students perceive moral and ethical situations common in athletic training practice as morally distressing as measured by the Measure of Moral Distress for Athletic Trainers?
3. In what ways do athletic training students experience ethics education within their program?
4. In what ways do athletic training students feel that their ethics education is preparing them to address moral and ethical concerns in practice?

Setting

This research took place via an online survey and individual teleconferencing interviews. The online survey was delivered through Qualtrics software. Online teleconference interviews were conducted via Zoom software.

Participants

We used multiple sampling methods to recruit students from CAATE-accredited athletic training programs. Athletic training program faculty were contacted by both publicly available email addresses and existing databases and asked to send the research recruitment email to all eligible athletic training students. To supplement this, we also used the Association for Athletic Training Education listserv for program faculty who have opted in for contact. Inclusion criteria consisted of athletic training students within CAATE-accredited athletic training programs who have experienced clinical immersion experience within the past six months. An immersive experience is defined as "a practice-intensive experience that allows the student to experience the totality of care provided by athletic trainers" and must be at minimum one continuous four-week period (CAATE, 2022c, p. 21). These students were the target audience as the moral distress tool is designed for individuals with clinical experience, and immersive clinical experiences are designed to be real experiences of clinical practice for students. Further, students currently participating in recent clinical practice are less likely to suffer the effects of euphoric recall bias or rosy retrospection bias, which may hinder their ability to accurately appraise their perceived level of distress from a given situation (Adler & Pansky, 2020). Students were excluded if they were not enrolled in a CAATE-accredited athletic training program or had not had a clinical immersion experience within the past six months.

Instrumentation

The quantitative data for this study was collected using multiple instruments, including a demographic questionnaire and the MMD-AT (Appendix A). This tool was chosen due to its ability to capture not only past experiences of moral distress but also potential perceptions of distressing situations. This tool was delivered through Qualtrics. Qualitative data for this study were collected using a semi-structured interview script. This script was developed based on previous research studying moral distress and ethics education effectiveness and was reviewed by content experts prior to implementation (Appendix B).

Demographic Questionnaire

The demographic questionnaire was developed specifically for this study to collect characteristic data from participants to examine the representativeness of the sample. The data collected by the demographic questionnaire included age, cultural ethnicity, and gender identity. This information is necessary to compare the results of the MMD-AT and qualitative interview with factors shown within the literature to increase the likelihood of moral distress, such as gender identity (O'Connell, 2015; Shehadeh et al., 2022).

Measure of Moral Distress for Athletic Trainers

The MMD-AT (Appendix A) is a valid tool to measure both the experiences of moral distress and the perception of moral distress experienced by athletic trainers (Drescher & Eberman, 2022c). The MMD-AT was developed based on the MMD-HP, a tool created to measure moral distress within health care providers by using ethical scenario prompts and having participants rate their (a) frequency of experience and (b) perception of the level of distress based on the prompt on two subscales (Epstein et al., 2019). While athletic trainers are health care providers, the MMD-HP was developed for providers that typically work within a hospital

setting, and the specific ethical scenario prompts reflected this. To develop the MMD-AT, the researchers first modified the scenarios to better reflect the practices of athletic trainers. The MMD-AT was then reviewed by a panel of six expert reviewers (three practicing athletic trainers, two trained educators and researchers, and one retired athletic trainer). These experts gave both qualitative and quantitative feedback in the form of a content validity index (CVI) score based on relevancy and clarity. Four rounds of review resulted in a total of 21 items included in the final tool. Overall, 20 out of 21 of the items on the MMD-AT had an item-CVI score >.79, and the full 21-item tool has a scale-CVI average of .80, indicating that the tool is a valid measure on both subscales of frequency and perception of level of moral distress in athletic trainers (Drescher & Eberman, 2022c).

Qualitative Interview Script

Interviews regarding student experiences and perceptions of ethics education within their programs took place with the use of a semi-structured interview script (Appendix B). The decision to use semi-structured interviewing was chosen to allow the researcher to ask follow-up and probing questions based on participant responses. Due to this being the first study of its kind within athletic training education literature, the interview script was developed based on previous research surrounding ethics education implementation and moral distress in other health care professions (Hancock et al., 2020; Megregian et al., 2021; Yazdani et al., 2020). The interview script was developed by the primary investigator and reviewed by the research team. After development, the script was evaluated and validated by expert reviewers. The reviewers consisted of experts with experience in educational interventions, consensual qualitative research, and semi-structured interviewing.

Data Collection

This study used concurrent mixed methods to answer the research questions. This project was deemed exempt by the Institutional Review Board at Indiana State University. Participants were recruited via email, and emails were sent out to program faculty weekly in the Fall of 2022 for an initial period of 4 weeks. Upon forwarding by program faculty, students were asked to follow a link to participate in the research survey. Students who fit the inclusion criteria received an informed consent prompt, completed the demographic questionnaire, and completed the MMD-AT. Students were also prompted to include their contact information for a follow-up interview concerning their perceptions of ethics education within their program. If they did not opt-in to the interview, they were finished with the research. All data was then downloaded, deidentified, and participants who opted out of participation or did not participate in the interview were removed prior to data analysis. Due to issues involving recruitment of students during the Fall of 2022, further data collection continued through the Winter of 2022 into 2023 until data saturation was reached. Current research analysis tradition estimates that data saturation is reached with between 8 and 15 interview responses, however, this number is variable based on content and context. Due to the foundational nature of this study, coupled with the lack of information available on this topic within the literature, the research team deemed that data saturation was reached at 20 interview responses.

For qualitative data, the primary investigator reached out to students to participate in semi-structured interviews, with interviews being scheduled based on their survey completion and agreement to participate. Students who agreed to participate in these interviews were prompted to provide an email address for contact purposes. They were then contacted to set up an interview time by the primary investigator. These interviews were conducted via Zoom

software used for meetings with people not all present in the same place. The participants were renamed to a pre-determined pseudonym within the Zoom platform, and their videos were turned off prior to recording. Each interview lasted an average of 31 minutes and 45 seconds, with the shortest interview lasting 21 minutes and the longest lasting 52 minutes. A transcript of each recording was generated via Zoom. The transcripts and audio recordings were then downloaded from the Zoom online platform, deidentified as necessary, and checked for accuracy before saving the data file on a secure cloud-based online storage platform. Deidentified interview transcripts were then sent to the participant for member-checking. These processes helped ensure the accuracy of transcription as well as allow participants to review their responses before data analysis.

Data Analysis

Quantitative Data Analysis

Data analysis consisted of descriptive statistics to support answering questions one and two using SPSS (Version 29). Student responses for the MMD-AT were first scored based on the individual tool directions. Each item is scored on a 4-point Likert scale on both subscales ranging from 0 (*Never* or *None*) to 3 (*Very Frequently* or *Very Distressing*). Scores from each of the subscales are then multiplied together per-item to create a composite score ranging from 0–9 for each of the 21 items. Finally, each composite score was added together to create a range of 0–189, with higher scores indicating higher levels of moral distress. Final scores, subscale scores, and composite scores were analyzed using measures of central tendency (mean, standard deviation, range). These scores were then used to contextualize the qualitative data analyzed from student transcripts.

Qualitative Data Analysis and Trustworthiness

A consensual qualitative research (CQR) analysis was used to analyze the qualitative data. CQR is supported in the literature as an effective method for gathering participant experiences in a methodologically rigorous way (Eldred et al., 2021; Grimes et al., 2021; Hill et al., 2005). To ensure such methodological rigor and trustworthiness of the data, multi-analyst triangulation, member-checking, and external auditing was performed. Before beginning the CQR process, each interview transcript was first sent for member-checking to ensure accuracy. The data analysis team, comprised of the primary investigator (PI) and two experienced qualitative researchers (M.J.D, L.E.E, K.E.G.) then engaged in the CQR process.

The data analysis team reviewed five representative transcripts independently by using an inductive approach. Each member of the team developed a preliminary domain list representative of the data. After this, the team met to discuss findings and develop a preliminary codebook. This codebook was then applied to two of the previously reviewed transcripts as well as three new, representative transcripts to ensure that the preliminary codebook was reflective of the data. The team met again to discuss findings and confirm the consensus codebook. The PI (M.J.D) then applied the consensus codebook to the remaining transcripts and divided the coded transcripts between the other two members of the research team (L.E.E, K.E.G). These members then checked the coded transcripts by recoding the transcripts. Internal auditing was completed with the two members of the team (L.E.E, K.EG.) exchanging their recoded transcripts and verifying that the codebook was applied correctly. During this exchange, the team member served as a tie breaker for the other's recoded transcripts when there was a disagreement on the application of codes.

The team then met to discuss findings and differing opinions to reach a consensus. After consensus was reached, cross-analysis was performed to ensure the coded ideas were properly depicted and correctly categorized using ATLAS.ti Web, a qualitative data analysis software (ATLAS.ti Scientific Software Development GmbH, v4.10.0-2023-02-03, 2023). The interview script, consensus codebook, cross-analysis, and coded transcripts were then shared with an external auditor (J.P.Y.), a third-party reviewer experienced in CQR and qualitative research, to confirm that the data analysis process was accurate and correctly represented the data. Once the audit was complete, a frequency count was performed to give context to the prevalence of coded responses based on the CQR tradition (Hill et al., 2005). Each response category was either assigned as general (20 or 19 responses), typical (between 12 and 18), variant (between 6 and 11 responses), or rare (between 2 and 4 responses), based on their frequency. Frequency counts less than 2 were considered outliers and were not included in the data analysis.

Summary

There is a data gap within athletic training literature surrounding moral distress and ethics education. The purpose of this study was to examine the current frequency and perception of moral distress in athletic training students, as well as their perceptions of the efficacy of their education surrounding ethics in practice. An email was sent to program faculty of professional-level athletic training programs asking them to forward it to their students for participation. Participants who consented to research completed the survey tool and participated in an online semi-structured interview. Qualitative and quantitative data was analyzed using statistical analysis and a consensual qualitative research approach. Data analysis sought to determine the frequency and perceptions of moral distress within athletic training students and whether students feel prepared to address moral and ethical ambiguity within their clinical practice.

CHAPTER 4

RESULTS

The purpose of this study was to examine frequency and perception of moral distress in athletic training students as well as examine their ethical preparedness from their athletic training programs. As more research is conducted focusing on moral distress in health care, it is imperative that focus be paid to students who are entering health care professions. It is known that health care providers working with direct patient care experience moral distress, and moral distress is linked to negative outcomes for these providers, including burnout and intent to leave a profession (Dzeng & Wachter, 2020; Lamiani et al., 2017). However, it is unknown if athletic training students experience moral distress. The accreditation standards for athletic training education programs states that students must have exposure to ethics training in the profession to address ethics in their clinical practice (CAATE, 2022a). It is therefore critical to understand whether or not this education is effective in preparing students to address the moral and ethical dilemmas that they will face in clinical practice. The purpose of this study was to examine frequency and perceptions of moral distress in athletic training students as well as students' perceptions on the efficacy of their moral and ethical education using a concurrent mixed-methods approach. The project centered around four research questions:

1. To what extent do athletic training students experience moral distress within their clinical experiences as measured by the Measure of Moral Distress for Athletic Trainers?

2. To what degree do athletic training students perceive moral and ethical situations common in athletic training practice as morally distressing as measured by the Measure of Moral Distress for Athletic Trainers?
3. In what ways do athletic training students experience ethics education within their program?
4. In what ways do athletic training students feel that their ethics education is preparing them to address moral and ethical concerns in practice?

I hypothesized that athletic training students would experience and perceive moral distress, and that they would perceive this distress similarly to currently practicing athletic trainers. I expected that athletic training students would both experience and perceive moral distress in clinical practice. However, I did not expect athletic training students to score highly on the Measure of Moral Distress for Athletic Trainers (MMD-AT), similar to preliminary data on practicing secondary school athletic trainers. This chapter presents the results of this study spanning from August 2022 to January 2023. This chapter discusses the results of the MMD-AT as well as the qualitative analysis of participant lived experiences with moral distress and ethics education contextualized through direct participant quotes.

Participants

Four hundred and sixty-seven athletic training education program faculty (program directors and clinical education coordinators) were contacted and asked to forward the recruitment materials to their students. Program faculty shared the recruitment materials with students, and students were recruited to participate in the study. Direct recruitment of athletic training students also occurred through the National Athletic Trainer's Association survey research service, with 1000 student emails sent to recruit participants. Due to the concurrent

mixed-methods approach, students who chose to participate in the survey were required to complete the MMD-AT as well as opt into and participate in a follow up interview.

Overall, a total of 20 students completed the survey and completed the semi-structured interview. Full recruitment information can be found in Figure 1. The average age of participants was 24.5 years old (*SD* = 4.0). The majority of the participants identified as women (*n* = 17), with the rest identifying as men (*n* = 2) or agender (*n* = 1). Most participants identified as Caucasian only (*n* = 16), with other participants identifying as Black/African-American (*n* = 1), Hispanic/Latinx (*n* = 1), or 2 or more ethnicities (Asian/Caucasian, *n* = 1, Black/Caucasian/Hispanic/Latinx *n* = 1). Full demographic data can be found in Table 1.

Clinical site and clinical immersion site information can be found in Table 2. The majority of students in this study were currently completing their clinical site rotation at a secondary school (*n* = 12). Seven students were completing their clinical site rotation in the collegiate setting, and one student was in a professional sports setting. Overall, 12 students completed a clinical immersion rotation in collegiate athletics, eight students completed a clinical immersion rotation at a secondary school, one student completed their immersion rotation in professional hockey, and one student completed their immersion rotation in the industrial setting. Some of the students had more than one clinical immersion rotation as noted in Table 2.

Figure 1

Recruitment of Athletic Training Students

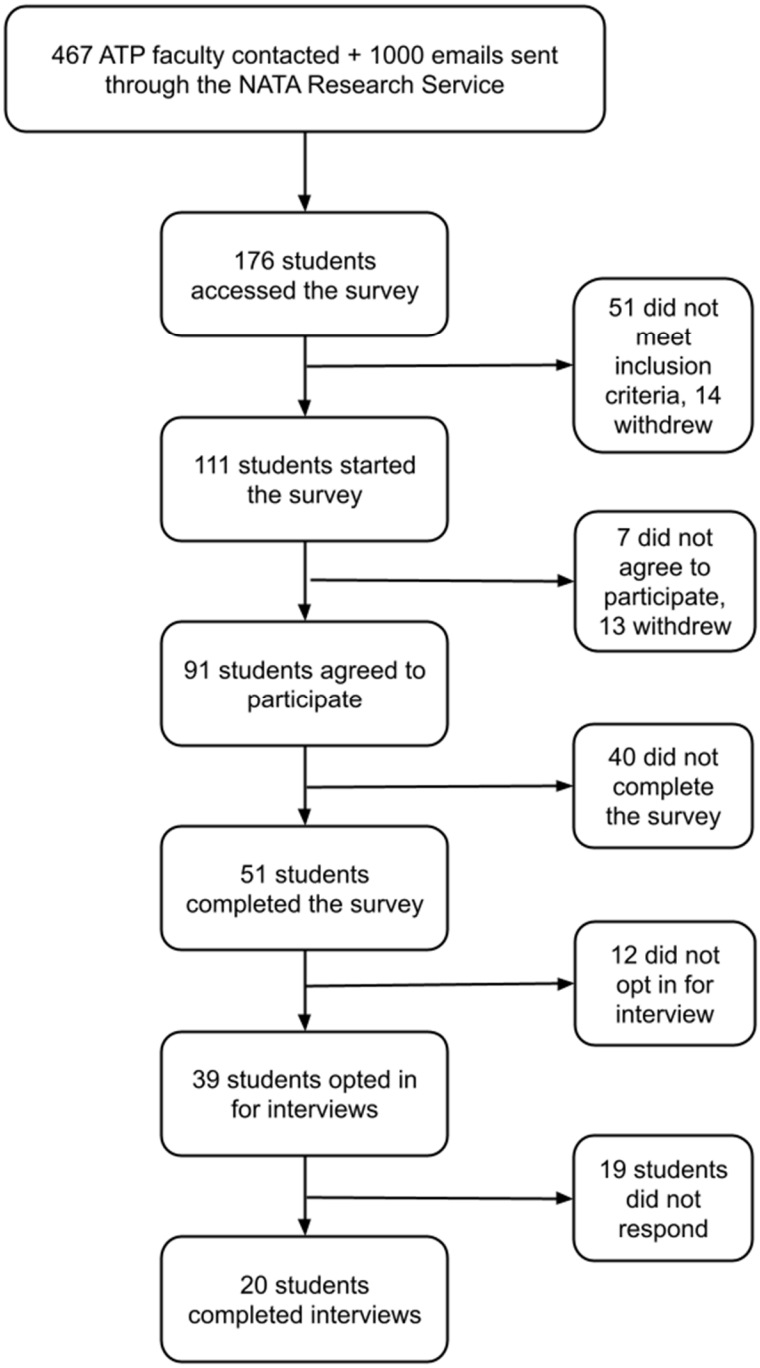


Table 1

Demographic Data

Pseudonym	Age	Gender Identity	Ethnicity
Aquinas	24	Woman	Caucasian
Aristotle	23	Woman	Caucasian
Camus	23	Woman	Caucasian
Cato	24	Woman	Caucasian
Descartes	24	Woman	Caucasian
Epictetus	25	Woman	Caucasian
Epicurus	23	Woman	Caucasian
Hawking	23	Woman	Caucasian
Heraclitus	24	Woman	Caucasian
Hobbes	22	Man	Caucasian
Hume	24	Woman	Asian, Caucasian
Kierkegaard	23	Woman	Caucasian
Locke	24	Woman	Prefer not to say
Machiavelli	24	Agender	Hispanic/Latinx
Marcus	23	Woman	Caucasian
Mill	23	Woman	Caucasian
Pascal	23	Woman	Caucasian
Plato	26	Woman	Caucasian
Seneca	24	Woman	Black/African-American
Socrates	41	Man	Black/African-American, Caucasian, Hispanic/Latinx

Table 2

Student Clinical Site and Clinical Immersion Rotations

Pseudonym	Clinical Immersion Site	Current Clinical Site
Aquinas	Secondary School	Secondary School
Aristotle	Collegiate Women's Basketball	Collegiate Women's Basketball
Camus	Collegiate Athletics	Collegiate Athletics
Cato	Collegiate Men's Basketball	Secondary School
Descartes	Collegiate Football	Collegiate Football
Epictetus	Secondary School	Secondary School
Epicurus	Collegiate Athletics, Secondary School	Secondary School
Hawking	Collegiate Football	Secondary School
Heraclitus	Collegiate Athletics, Secondary School	Secondary School
Hobbes	Collegiate Women's Soccer	Secondary School
Hume	Collegiate Football	Secondary School
Kierkegaard	Professional Hockey	Professional Hockey
Locke	Collegiate Athletics	Collegiate Athletics
Machiavelli	Secondary School	Secondary School
Marcus	Secondary School	Secondary School
Mill	Collegiate Athletics	Collegiate Athletics
Pascal	Collegiate Football	Collegiate Athletics
Plato	Industrial Setting	Secondary School
Seneca	Secondary School	Secondary School
Socrates	Secondary School	Collegiate Wrestling

Quantitative Data—Measure of Moral Distress for Athletic Trainers

We compared MMD-AT scores with demographic variables to identify differences in composite, frequency, and perception scores for age, gender identity, and ethnicity. There was no significant difference between scores on the MMD-AT based on demographic variables. Overall, participants scored relatively low on the MMD-AT with an average total score of 23.80 (*SD* = 24.5) out of a possible 189, indicating that, while students do experience moral distress, their overall moral distress is low. However, there was a wide range of scores across participants (range: 0–73). This range supports the idea that the experience and perception of moral distress is highly individualized.

Frequency of Moral Distress

Individual subscale scores were analyzed for each item to identify which items were experienced the most or least frequently and which items were perceived to cause the highest or lowest levels of moral distress. The highest frequency score items were "required to care for patients who have unclear, inconsistent treatment plans or who lack goals of care" (*M* = 1.15, *SD* = 0.88); "being asked to order or carry out orders for what I consider to be unnecessary or inappropriate tests and/or treatments" (*M* = 0.80, *SD* = 0.70); and "unable to provide optimal care due to pressures from administrators, parents, or other stakeholders" (*M* = 0.75, *SD* = 0.85). The lowest frequency score items were "required to work with other health care providers who are not as competent as the patient care requires" (*M* = 0.30, *SD* = 0.47); "follow a physician's, family members, or support system's request not to discuss the patient's prognosis with the patient" (*M* = 0.30, *SD* = 0.66); and "continue to provide aggressive treatment for a patient who is most likely not going to recover when no one will make a decision to withdraw it" (*M* = 0.30, *SD* = 0.73).

Perception of Moral Distress

The highest perception score items were "letting patient care suffer because of a lack of provider communication or continuity" (*M* = 2.11, *SD* = 1.10); "work with health care providers who do not treat vulnerable or stigmatized patients with dignity and respect" (*M* = 2.11, *SD* = 1.15); and "witness a standard of practice or a code of ethics violation and do not feel sufficiently supported to report the violation" (*M* = 2.0, *SD* = 1.11). The lowest perception score items were "witness health care providers giving 'false hope' to a patient or family" (*M* = 1.32, *SD* = 1.06); "being asked to order or carry out orders for what I consider to be unnecessary or inappropriate tests and/or treatments" (*M* = 1.32, *SD* = 1.06); and "having excessive medical documentation requirements that compromise patient care" (*M* = 1.47, *SD* = 0.96). Full scoring results can be found in Table 3.

Table 3

Frequency and Level of Distress Scores

	Frequency of Distress Score				Level of Distress Score			
Item	*M*	*SD*	Min	Max[a]	*M*	*SD*	Min	Max[a]
1. Witness health care providers giving "false hope" to a patient or family.	0.40	0.50	0	1	1.32	1.06	0	3
2. Follow the family's or support system's insistence to continue further treatment even though I believe it is not in the best interest of the patient.	0.60	0.88	0	3	1.53	1.07	0	3

Item	Frequency of Distress Score				Level of Distress Score			
	M	*SD*	Min	Max[a]	*M*	*SD*	Min	Max[a]
3. Follow a physician's, family members, or support system's request not to discuss the patient's prognosis with the patient.	0.30	0.66	0	2	2.00	1.20	0	3
4. Participate in an environment that gives inconsistent messages to a patient, family, or support system.	0.35	0.59	0	2	1.63	1.21	0	3
5. Required to care for patients who have unclear, inconsistent treatment plans or who lack goals of care.	1.15	0.88	0	3	1.63	0.96	0	3
6. Being asked to order or carry out orders for what I consider to be unnecessary or inappropriate tests and/or treatments.	0.80	0.70	0	2	1.32	1.06	0	3
7. Continue to provide aggressive treatment for a patient who is most likely not going to recover when no one will make a decision to withdraw it.								
8. Feeling required to care for patients whom I do not feel prepared or qualified to care for.	0.45	0.69	0	2	1.79	10.8	0	3
9. Participate in care that I do not agree with but do so because of fear of legal action or influence from extraneous sources.	0.40	0.75	0	3	1.95	1.08	0	3

Item	Frequency of Distress Score				Level of Distress Score			
	M	*SD*	Min	Max[a]	*M*	*SD*	Min	Max[a]
10. Letting patient care suffer because of a lack of provider communication or continuity.	0.55	0.51	0	1	2.11	1.10	0	3
11. Unable to provide optimal care due to pressures from administrators, parents, or other stakeholders.	0.75	0.85	0	3	1.84	1.02	0	3
12. Feel pressured to avoid taking action when I learn that another colleague has made a medical error.	0.35	0.59	0	2	1.58	1.17	0	3
13. Witness a standard of practice or a code of ethics violation and do not feel sufficiently supported to report the violation.	0.55	0.95	0	3	2.00	1.11	0	3
14. Feel pressured to ignore situations in which patients have not been given adequate information to ensure informed consent.	0.35	0.67	0	2	1.95	1.27	0	3
15. Experience lack of administrative action or support for a problem that is compromising patient care.	0.70	0.92	0	3	1.84	1.17	0	3
16. Experience compromised patient care due to lack of resources, equipment, or facility capacity.	0.65	0.88	0	3	1.63	1.01	0	3

Item	Frequency of Distress Score				Level of Distress Score			
	M	*SD*	Min	Max[a]	*M*	*SD*	Min	Max[a]
17. Required to work with other health care providers who are not as competent as the patient care requires.	0.30	0.47	0	1	1.74	0.99	0	3
18. Being required to care for more patients than I can safely care for.	0.65	0.75	0	2	1.68	0.95	0	3
19. Having excessive medical documentation requirements that compromise patient care.	0.35	0.75	0	3	1.47	0.96	0	3
20. Work within power hierarchies in teams, units, and the institution that compromise patient care.	0.30	0.82	0	3	1.63	1.07	0	3
21. Work with health care providers who do not treat vulnerable or stigmatized patients with dignity and respect.	0.50	0.69	0	2	2.11	1.15	0	3

[a]Maximum score of 3

Composite Scores

Individual item composite scores were analyzed for each item on the MMD-AT to identify which items caused the greatest or least levels of moral distress. The items with the highest composite scores were "required to care for patients who have unclear, inconsistent treatment plans or who lack goals of care" ($M = 1.85$, $SD = 2.35$); "unable to provide optimal care due to pressures from administrators, parents, or other stakeholders" ($M = 1.85$, $SD = 2.52$); and "experience lack of administrative action or support for a problem that is compromising patient care" ($M = 1.80$, $SD = 2.63$). The items with the lowest composite scores were "feel pressured to avoid taking action when I learn that another colleague has made a medical error"

(*M* = 0.55, *SD* = 1.05); "required to work with other health care providers who are not as competent as the patient care requires" (*M* = 0.60, *SD* = 0.99); and "having excessive medical documentation requirement that compromises patient care" (*M* = 0.60, *SD* = 1.43). Composite score data can be found in Table 4.

Table 4

Total MMD-AT Score and Composite Scores

Item	Composite Score			
	M	*SD*	Min	Max[a]
1. Witness health care providers giving "false hope" to a patient or family.	0.80	1.20	0	3
2. Follow the family's or support system's insistence to continue further treatment even though I believe it is not in the best interest of the patient.	1.00	1.56	0	6
3. Follow a physician's, family members, or support system's request not to discuss the patient's prognosis with the patient.	0.80	1.91	0	6
4. Participate in an environment that gives inconsistent messages to a patient, family, or support system.	0.70	1.45	0	6
5. Required to care for patients who have unclear, inconsistent treatment plans or who lack goals of care.	1.85	2.35	0	9

Item	Composite Score			
	M	*SD*	Min	Max[a]
6. Being asked to order or carry out orders for what I consider to be unnecessary or inappropriate tests and/or treatments.	1.40	1.93	0	6
7. Continue to provide aggressive treatment for a patient who is most likely not going to recover when no one will make a decision to withdraw it.	0.85	2.16	0	9
8. Feeling required to care for patients whom I do not feel prepared or qualified to care for.	0.90	1.65	0	6
9. Participate in care that I do not agree with but do so because of fear of legal action or influence from extraneous sources.	0.95	2.14	0	9
10. Letting patient care suffer because of a lack of provider communication or continuity.	1.30	1.30	0	3
11. Unable to provide optimal care due to pressures from administrators, parents, or other stakeholders.	1.85	2.51	0	9
12. Feel pressured to avoid taking action when I learn that another colleague has made a medical error.	0.55	1.05	0	3
13. Witness a standard of practice or a code of ethics violation and do not feel sufficiently supported to report the violation.	1.50	2.68	0	9
14. Feel pressured to ignore situations in which patients have not been given adequate information to ensure informed consent.	0.95	1.96	0	6

Item	Composite Score			
	M	*SD*	Min	Max[a]
15. Experience lack of administrative action or support for a problem that is compromising patient care.	1.80	2.63	0	9
16. Experience compromised patient care due to lack of resources, equipment, or facility capacity.	1.50	2.44	0	9
17. Required to work with other health care providers who are not as competent as the patient care requires.	0.60	0.99	0	3
18. Being required to care for more patients than I can safely care for.	1.30	1.56	0	4
19. Having excessive medical documentation requirements that compromise patient care.	0.60	1.43	0	6
20. Work within power hierarchies in teams, units, and the institution that compromise patient care.	1.30	2.34	0	9
21. Work with health care providers who do not treat vulnerable or stigmatized patients with dignity and respect.	1.30	1.97	0	6
Overall MMD-AT Score	23.80	24.47	0	73

[a]Maximum score of 9

Qualitative Data

Data analysis using the CQR method identified three domains with 11 categories related to student experiences with moral distress as well as their perceptions about their educational preparation (see Figure 2). The frequency and CQR commonality characterizations are found in Table 5. Representative quotes of all domains and categories can be found in Appendix C.

Figure 2

Domains and Categories

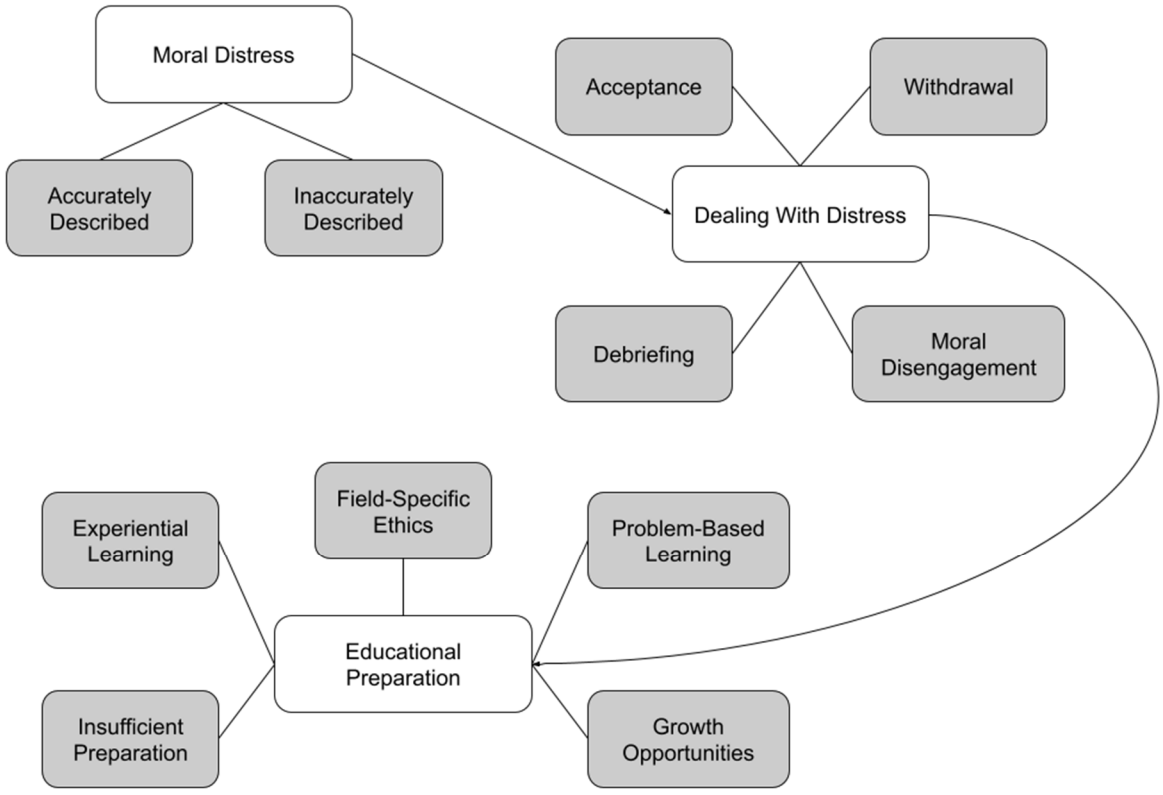


Table 5

Domain and Category Frequency Chart

Domain, Category	Count	CQR Commonality Characterization
Moral Distress Definition		
Accurately Described	12	Typical
Inaccurately Described	8	Variant
Dealing with Distress		
Withdrawal	8	Variant
Moral Disengagement	8	Variant
Acceptance	5	Variant
Debriefing	17	Typical
Educational Preparation		
Field-Specific Ethics	15	Typical
Problem-based Learning	8	Variant
Experiential Learning	20	General
Growth Opportunities	15	Typical
Insufficient Preparation	19	General

Note. General=19–20 Cases, Typical=10–18 cases, Variant=4–9 cases, Rare=2–3 cases

Moral Distress Definition

At the beginning of the interview, I read the definition of moral distress before asking the participants to share an experience where they believed they experienced moral distress in their clinical practice. The data analysis team coded these responses based on how accurately each scenario aligned with the definition of moral distress defined in the literature (Epstein et al., 2019; Morley et al., 2021). We then sorted accurate responses into their requisite causal sources: patient-level, unit/team-level, or organizational/system-level moral distress (Epstein et al., 2019; Hamric & Epstein, 2017).

Accurate: Patient-level

Patient-level moral distress surrounds an experience where a provider feels distressed due to inadequate patient care or experience caused by parties outside of the health care team. For

example, this could include stakeholder pressures for care outside of the best interest of the patient, or stakeholders otherwise influencing the quality of care (Epstein et al., 2019). Participants discussed experiences where they felt moral distress due to issues concerning patient care. Seven of the participants perceived patients were receiving improper health care and felt unable to intervene. Locke noted:

> There was a patient, I believe their pronouns were different then they were assigned at birth. And I heard the nurse go in, take care of the patient, and then, like the second [the nurse] came out, it was a lot of kind of just like discrimination, based on that fact. Just saying things that I wouldn't expect health care professionals to say to about a patient, or just about any human. And I just had to sit there . . . I couldn't really get out of this situation. I could, like, see how they kept going back into that room, so I could tell that patient was not having a good experience, so it made me feel that there was nothing I could do about it, and that's not how I'd normally like respond to situations like that.

Participants also noted moral distress when witnessing patient care being directly influenced by external stakeholders, including pressure from coaches and administrators.

Accurate: Unit/Team-level

Unit/team-level moral distress occurs when there is inadequate communication or collaboration between health care team members, which leads to poor patient outcomes or inadequate patient care (Epstein et al., 2019). Nine of the participants spoke about experiences where they felt unable to do the right thing due to interpersonal difficulties or fear of retaliation for questioning their preceptors. Epictetus stated:

> We had an athlete who had fever and was generally just unwell. The same athlete also had a metatarsal break in a foot. This was brought to my attention. However, the football

> game was a high stakes game, so he was allowed to play. [The athlete] was also given like a steroid shot before the football game to help with the fever and other things. And to me it felt like the game was more important than the overall athletes health. So that did not sit well with me.

Many students noted that they also felt moral distress when perceiving direct ethical violations performed by preceptors and being pressured to comply with the preceptor's directive. Epictetus stated that they felt moral distress as a direct result of inadequate patient care when the medical team allowed a patient to continue playing while ill.

Accurate: Organization/System-Level

Systemic issues outside of direct patient care cause organizational/system-level moral distress, including sociocultural issues, departmental or organizational pressures, or lack of resources (Epstein et al., 2019). Eight of the participants noted that specific organizational constraints were causes of their moral distress, including administrative red tape and improper organizational decision-making structures. Plato, in their rotation at an industrial setting, identified:

> There's been a couple of instances more specifically within my immersion experience in the industrial setting, where I felt that I was under a little bit of a moral distress. Not necessarily pushed to act one way or the other in this particular instance, but my inability to do so within the industrial setting. What a lot of people don't know about it, or they come to find when they go into [an industrial setting], is that there's a lot of red tape or things that hold you back from being able to provide your utmost level of care that you know how to provide. And it was very frustrating knowing that I have the tools in my belt with what I've been educated on this far that I couldn't work as effectively as I knew I

> could . . . but if I can do something, and I am certified to do so, it's frustrating to have to jump through a bunch of hoops, to be able to do my job or not even be able to do it in certain capacities because of that red tape.

Students noted that they felt inhibited from doing the right thing due to the hierarchy of being a student, with many participants stating that their role as a student put them in a position that made them feel like they could not speak up or speak out about patient care they perceived as improper.

Inaccurate Definition

While many participants described events that accurately depicted moral distress, many did not. Eight students discussed events, such as emergency medical care or confrontations with stakeholders, that caused some level of distress. Although distress is a unique experience for each individual, the situations described by these participants were otherwise inaccurately characterized as moral distress as they did not otherwise inhibit the participant from acting morally.

Some participants who inaccurately characterized moral distress noted that they felt distressed when having a different opinion from their preceptors on patient care or treatment and therapy techniques. While these instances may have been distressing for the student, they would not typically qualify as morally distressing events, as they did not indicate that they felt otherwise unable to provide care. Aristotle stated:

> We had a patient that he would come in very often to do his rehab and prehab, and things like that. And he was just very diligent about it, so we didn't pay attention like to him for the most part. And then he, a couple of weeks later, retears his ACL. And so that kind of gives me like, 'what could have we done better?' I've been thinking about that a lot, so I

> guess that would be probably something like me and my preceptor, how could we have changed that.

Other participants indicated a similar inaccurate feeling of moral distress when a patient was injured after their care. These students indicated that these scenarios caused distress due to feeling regret rather than an inability to act on their moral beliefs.

Dealing with Distress

Participants described multiple ways they dealt with their feelings when distressed. The data analysis team identified four general categories in which students dealt with distress: withdrawal, moral disengagement, acceptance, and debriefing.

Withdrawal

When facing the negative feelings associated with moral distress, some participants chose to withdraw from the event to decrease the adverse effects of the distress. Some students mentioned that they focused on avoiding the causes of moral distress, noting that they were willing to ignore causal issues or situations instead of creating a more positive work environment. One student even noted that they would physically leave the space in which they were feeling moral distress, deciding instead to focus on other tasks to complete. This choice to create distractions as a method of dealing with distress was echoed in other participant responses. Many participants who used withdrawal stated that they actively sought distraction methods such as refocusing on another task, hanging out with friends, or breathing techniques to take their minds off the event. Kierkegaard stated:

> I always have in the back of my mind like I don't want to come in like with an elevated mood . . . so, like I kind of give myself, like time to let my body like calm down . . . I just try to focus more on what I can control and, like focus on, like myself, and use a lot of

> like distraction, until, like I feel in a place that I can like, really deal with whatever the situation is.

Multiple participants also stated that they do not have coping strategies, instead choosing to ignore or forget about the event entirely.

Moral Disengagement

Moral disengagement is a latent psychological event that reframes one's moral beliefs to reduce internal moral sanctions caused by immoral action, and there are eight types of moral distress (Bandura, 2016). Many students used moral disengagement to cope with feelings of moral distress. Seven of the eight participants used displacement of responsibility to relieve themselves of agency in morally distressing situations, stating that, as a student, they were ultimately not liable or in charge of patient care. Further, students shifted responsibility to preceptors or other stakeholders for errors in care, using their status as students to reduce some of the negative feelings associated with moral distress. For example, Kierkegaard noted that they trusted that someone else would handle the morally distressing situation due to a lack of power as a student, describing an external locus of control for moral action. A few students further displaced responsibility for their actions by leaning into the fact that their care was based on science and the best available evidence and therefore was not subject to whether it was morally right or wrong. Hobbes stated, "I mean, knowing that my clinical decisions are based on research and best practice. And people outside of the relevant health care realm can't pressure my decisions because I'm making them for good reason." Some students used euphemistic labeling to justify why they did not act and reduce feelings of moral distress, stating that some injuries or problems were not as bad as they seemed.

Acceptance

Some participants used acceptance as a coping strategy for dealing with distress. Acceptance is a self-regulation strategy that focuses on a favorable reception of one's emotions and situations (Williams & Lynn, 2010; Wojnarowska et al., 2020). For example, when faced with situations of moral distress, some students took the viewpoint that some things are out of their control, such as others' opinions or external outcomes. Aristotle described accepting outcomes as they are and taking action to work around them rather than avoid them, stating:

> Sometimes it is what it is, and there's nothing that I can do about it. So kinda coping through the way of, [the situation is] going to work out this way, and I'm going to have to work around that and do as much as I can through the way it's working out.

Other participants noted that feelings of moral distress were inherent in clinical practice; Camus noted that they would never get rid of their full moral distress, and they accepted that they could not entirely escape the negative feelings associated with it.

It is essential to note the difference between moral disengagement and acceptance. Moral disengagement is a mechanism to reduce the moral sanctions caused by one's moral beliefs (Bandura, 2016). In this way, moral disengagement is a mechanism that wholly removes the moral ambiguity of a situation. On the other hand, acceptance does not remove the moral implication of one's actions. In contrast, acceptance allows an individual to confront and address their negative feelings and self-imposed moral sanctions that allow the person to deal with them. The critical difference is whether or not moral sanctions continue to exist.

Debriefing

One of the participants' most prevalent coping mechanisms for dealing with distress was the debriefing process. Debriefing is an analysis of an experience in which a person or persons

review lessons and learn from an experience and integrate that lesson into their knowledge (Gardner, 2013). Debriefing is a common process used in simulation and experiential learning and is usually done by a trained facilitator. In the case of our participants, they engaged in some form of debriefing, but did not ensure they were doing so with a trained facilitator. Participants used this technique in various ways, from discussing distressing situations with mentors or preceptors to casual conversations with people not in health care professions. Most students noted that these debriefs allowed them to reduce some of their distress while learning something from their experiences. Hume noted, "being able to actually talk about [distressing events], and kind of like, see it back, because that's been the most helpful."

Several students used self-debriefing to deal with their distress. These students focused on specific techniques, such as journaling or reflection, to assess their experiences and gather valuable insights. In addition, some students used professional services, such as counseling or therapy, to debrief about their moral distress and deal with the negative feelings therein. Other students noted speaking to peers as a way to vent frustrations and relieve stress. Ultimately, most of the students who used debriefing to deal with distress noted that this strategy helped reduce their negative emotions overall and better understand their clinical practice.

However, some students did not find that debriefing relieved their distress, noting that discussing morally distressing events, especially to those outside of the health care professions, could increase their distress levels due to outside persons not understanding the context of the situations. One student noted that, while they still choose to debrief about their experiences, these debriefs do not decrease their level of moral distress as they still find themselves reliving the experience and feeling negative emotions. Notably, many of the students who identified debriefing as ineffective were either debriefing with untrained individuals or taking part in

emotional venting with peers, both of which could decrease the effectiveness of debriefing (Roh et al., 2016).

Educational Preparation

As students prepare to enter the athletic training profession, they must learn skills and strategies for dealing with moral and ethical dilemmas. While the CAATE has specific standards related to ethics education in athletic training, these standards are not prescriptive and each program has the academic freedom to address these standards (CAATE, 2022a). Participants described how their programs addressed these CAATE standards, including field-specific ethical training, problem-based learning, and experiential learning. Students also noted that some of the moral distress they experienced served to prepare them through professional and personal growth opportunities. Even so, some students noted that their program did not sufficiently prepare them to address moral and ethical dilemmas in practice.

Field-Specific Ethics

Field-specific ethics is education focused on the ethical issues in a particular field and includes professional conduct training, research ethics training, and profession-specific ethical guidelines (Mulhearn et al., 2017). Some participants stated that they had a class during their program that discussed field-specific ethics, including the NATA Code of Ethics or the Board of Certification for the Athletic Trainer (BOC) Standards for Professional Practice. Cato indicated:

> We do have a class in our second year. That is, it's called professional practice. And it's all like around like code of ethics, and like I mean, there's like budgeting and stuff in there, but there it's like a big part of it is talking about like the code of ethics and kind of just your like the requirements that we have to follow as just like athletic trainers.

Other students noted that they received direct education on navigating ethically ambiguous scenarios from a legal standpoint in health care. Most students who received field-specific ethics noted that the education was broad and was typically combined with other information in the same class, such as budgeting or health care administration. In one specific case, the participant described patient-centered care as a form of field-specific training, where things like inclusion and shared-decision making were ways in which they engaged in the ethical practice of athletic training.

Problem-Based Learning

Students described educational activities that would reasonably be characterized as problem-based learning (PBL). PBL is an instructional construct focusing on real-world problems to teach skills, concepts, and ideas (Mulhearn et al., 2017; Trullàs et al., 2022). Students noted that programs often informally integrated PBL into the course, with educators either discussing possible scenarios or creating informal case studies to help students evaluate how they would perform. Five of the students noted that their program used structured assessments focused on moral or ethical dilemmas, such as simulation or standardized patient experiences. For example, Aquinas noted:

> I think what our program a lot of times does is they realize that there's only so much that like that, you know, formal education reading out of a book being lectured on it can teach you a lot of it is like you have to figure [out]. You have to be put in situations where you can safely figure it out for yourself. . . . We had like a capstone exam. And one of those was dealing with a patient that you had referred, or something, and then, like having been cleared by a doctor or by one of the doctors, but then have like gone doctor shopping and got cleared by a different doctor for whatever was wrong with them. And so then you had

> to kinda figure out how you're going to deal with that. It was kind of cool, because, like you got to start as like doing the email. And then the situation was presented of what had happened.

These scenarios allowed students to apply their skills and knowledge in situations that could potentially occur in clinical practice.

Experiential Learning

Experiential learning is an educational theory that examines how experiences influence the process of knowledge acquisition and the development of understanding (Kolb, 1984). Students identified experiential learning as the most influential aspect of their ethical and moral education. Many students noted that observing their preceptors or professors allowed them to learn how to deal with moral and ethical dilemmas. Heraclitus noted:

> Being able to watch my preceptors as they handle certain situations [has been beneficial]. And then, after that situation is over, being able to ask questions, or for them to kind of drive a conversation about why they did it that way, and what like, what kind of things they're trying to do, like, what they're trying to accomplish. Yeah, I think that's very beneficial in, like, learning how to deal and cope with cope with these things are just there.

Some students noted that their clinical experiences also allowed them to practice and experiment with dealing with ethical ambiguity, a central part of experiential learning. Notably, students who expressed experiential learning also noted how vital clinical experiences were to their education and growth as future athletic trainers.

Growth Opportunities

Many students who experienced moral distress identified that the experience itself was an opportunity for education and growth as a person and a professional. Students noted that having these encounters and experiences helped them understand how they would act in similar situations, and they learned from the experience. While many students noted how their positive experiences helped foster growth, some noted that negative experiences helped them grow as well. Hawking stated that, “I wouldn't say it wasn't a bad experience. It was. I think we all need to have experiences like that to know how we want to act, and who we want to be in the future." The majority of students were able to see these negative experiences as growth opportunities, adding to their educational preparation as future professionals.

Inadequate Preparation

While many students noted that their programs helped prepare them to deal with future ethical and moral dilemmas in clinical practice, almost all students also noted their experiences, thus far, were insufficient. Students noted insufficient didactic education on morals and ethics, speaking to a lack of class discussion, focused classroom experiences, and an overall lack of formal education on morals or ethics. For example, Machiavelli stated that the only experience they received was a two-minute conversation, which they stated acted as a “foundation that has cracks in it” that they expected to need to fill in their first few years of practice (Appendix C).

Students also recounted that they feel they would not have the skills or preparation to know what to do in a morally or ethically ambiguous situation, stating that they would not have the knowledge, coping skills, or support to handle a situation that causes moral distress. Overall, students who identified inadequate preparation found that they did not have the confidence or knowledge to deal with moral and ethical dilemmas in clinical practice.

In reviewing their insufficient preparation, students identified that they wanted more exposure to moral and ethical dilemmas in their education. Some students said they wanted more classroom-based discussion, while others said they wished they could experience more diverse clinical settings. Hobbes noted:

> Honestly, I don't think it's something that's thought about a ton. We currently have a lot of collegiate clinical sites. The decision is being made between the athletic trainer and the athlete, or maybe one doc or or two docs, but you don't really deal with parents at all. I guess I really haven't seen a ton of, like, there have been phone calls to parents or that sort of stuff where it's, like, 'hey, your kid has a concussion. This is what we're going to do. This is what you should do at home.' There hasn't really been a ton of kick back, so I haven't really seen any of that. In learning to deal with that, I would say . . . it should be more inter-worked in our education.

Many students also noted that this lack of exposure made them uncomfortable with the prospect of their transition to autonomous practice.

Summary

Our results indicate that, while students are experiencing moral distress, the level of distress they experience is low with the most frequent and highest level of distress caused by ineffective patient care and lack of communication within the health care team. The majority of students were able to articulate situations in which they experienced moral distress, and students used debriefing, withdrawal, acceptance, and moral disengagement as mechanisms to deal with distress. Generally, participants noted that their program used experiential learning as a mechanism to educate students on ethical practice. Other strategies for ethics education included field-specific ethics and PBL. Students identified that many times, experiences of moral distress

were seen as growth opportunities. Still, the majority of students indicated that their ethical education was insufficient, with specific note given to a lack of experiences. Athletic training education should continue to focus on developing learning strategies.

CHAPTER 5

DISCUSSION

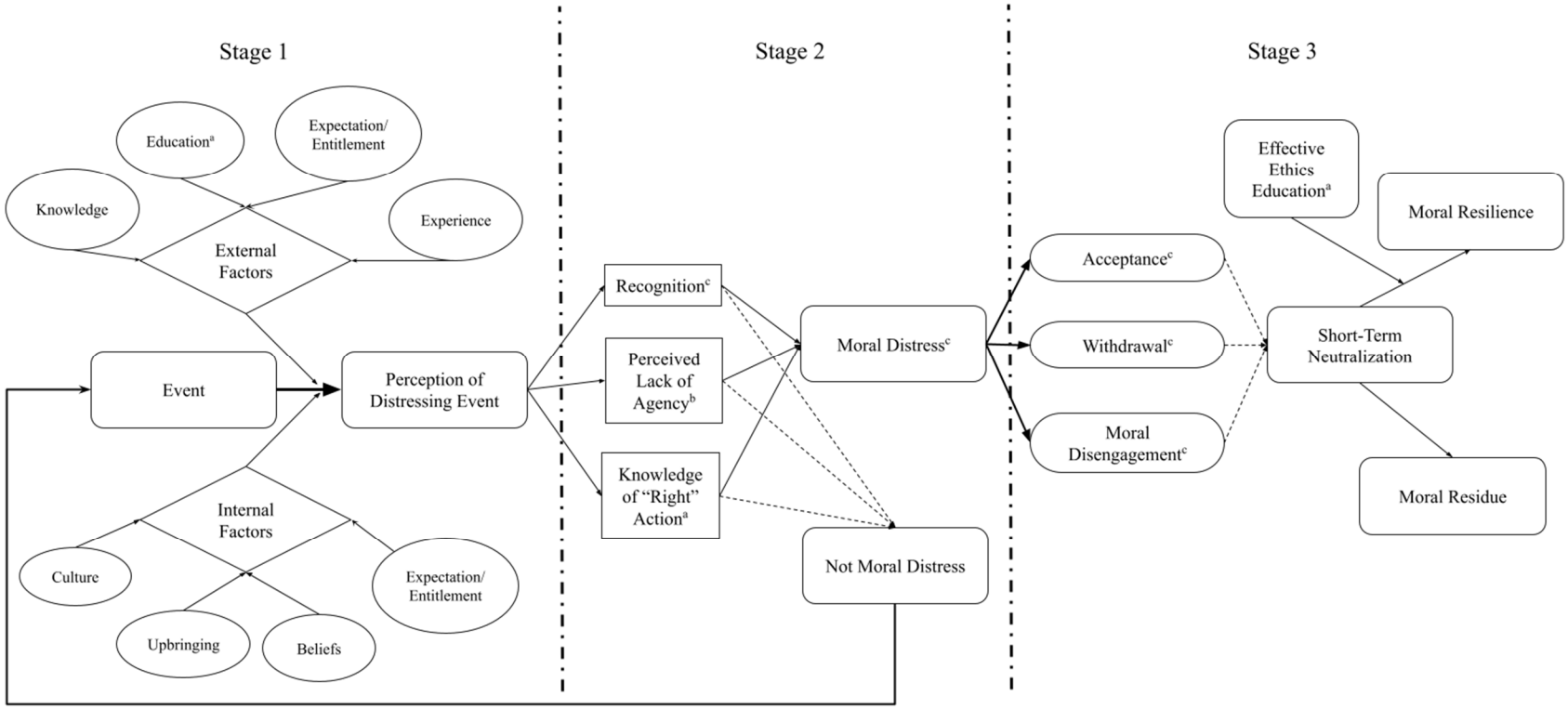
Morals and ethics are inherent in health care, and students must have education and training on how to approach moral and ethical issues in practice to reduce the likelihood of adverse effects on providers and patients. This study is the first one to examine athletic training students' experiences and perceptions of moral distress, coping mechanisms used to deal with that distress, and student experiences related to ethical preparedness in athletic training education. Further, this study is the first to examine the link between moral distress and disengagement. As mentioned, many programs do not provide sufficient ethical education to athletic training students. Every participant in this study identified some way in which they believed their athletic training program did not sufficiently prepare them to deal with moral and ethical dilemmas in practice. Some participants stated that they felt wholly unprepared for future ethical dilemmas, while others noted that they at least had some foundation but were otherwise unprepared for autonomous decision-making. While almost every participant indicated that their program at least discussed health care ethics, many participants felt insufficiently prepared.

This discussion focuses on a progression framework I developed based on the data to structure the progression of student experience with moral distress. The Framework for Athletic Training Student Moral Distress Progression ("the framework") is designed to help support programmatic improvements. The framework also contextualizes effective, evidence-based

interventions to address student shortcomings at each stage of the framework. This framework was developed using the data in the following way: lived experiences of students relative to moral distress is captured in the later part of Stage 2, processes of dealing with distress is contextualized in Stage 2, and student educational preparation is captured both in Stage 1 and Stage 3. While this framework depicts a linear process, the development of moral distress and the interconnection of internal factors, external factors, and ethics education is not linear. This discussion presents a representative curricular model for teaching ethics in athletic training education to help clarify how this framework could be applied to the athletic training curriculum. The framework can be seen in Figure 3.

Figure 3

Framework for Athletic Training Student Moral Distress Progression



[a] Representative of the "Educational Preparation" domain
[b] Representative of the "Dealing with Distress" domain
[c] Representative of the "Moral Distress" domain

Framework for Athletic Training Student Moral Distress Progression

Stage 1: Occurrence of an Event

In the progression of moral distress for athletic training students, the first step is for an event to occur. This event can be any event in clinical practice that has the potential for ambiguity for the athletic training student or preceptor. From my data, these events could include but are not limited to making a diagnosis, discussing plan of care options for a patient, or dealing with external stakeholder input on patient care.

In any event, many factors influence one's interpretation of the implications of an event. Internal factors, such as a student's cultural identity, upbringing, and belief system, as well as external factors, such as a lack of complete understanding of a situation, lack of experience and pattern-recognition, or overall wellbeing, help to qualify the interpretation of an event (Davis et al., 2012). Some participants in my study noted that their appraisal or interpretation of moral distress resulted from their upbringing or worldview and was not necessarily mediated by their education. Depending on these factors, a student could perceive an event differently, whether as distressing or not distressing. The interpretation of an event as distressing defines the end of stage one.

Distress is any emotional, physical, or social pain that causes a person to feel anxious, sad, or otherwise suffer (Ridner, 2004). Distress is different for everyone, and each participant in my study provided their understanding of distress prior to each interview. Most participants in this study noted that they felt distressed when they felt anxious, uncomfortable, or unsettled. For the majority of participants, their unique understanding of distress closely resembled the given definition. Still, it is essential to contextualize an individual's understanding of distress to help identify the factors that influence the interpretation of an event. For example, one participant

noted that they experienced a morally distressing event but did not interpret it as a negative experience due to their understanding of what distress meant. In this way, their belief in the meaning of distress mediated their response to a potentially distressing event and ultimately changed their pathway through this Framework.

Intervention Strategies for Stage 1

There are actionable interventions that athletic training educators can implement in order to help develop moral and ethical practice in students currently in Stage 1. During this stage, educators must focus on helping students conceptualize their understanding of distress and factors that could contribute to their interpretation of distress. For example, some factors that predict moral distress in health care providers include burnout, low psychological empowerment, and low levels of self-efficacy (Lamiani et al., 2017). Educators should use the Level of Distress subscale of the MMD-AT as a tool to measure student perception of ethical issues in clinical practice. One of the most effective ways to develop an understanding of potential predictive factors is through the development of self-awareness. Self-awareness is the ability to see oneself without biases and become the object of attention (London et al., 2022).

Self-awareness training is used in other health care professions to develop professionalism, increase patient-provider relationships, and improve job skills (Rasheed et al., 2019). The development of self-awareness typically follows a process, beginning with reflective self-awareness and ending with mindfulness (London et al., 2022). Educators can implement reflection-based learning strategies to develop self-awareness (Rasheed et al., 2019). The importance of self-awareness is seen in its integration into influential learning theories, such as Experiential Learning Theory (ELT; Kolb, 1984). This learning theory focuses on the interaction between experience and learning and how experiences can help create and develop knowledge

and understanding of a topic. According to ELT, reflection and developing self-awareness from experiences are core learning processes. All participants in my study noted some interaction with experiential learning, with many stating that it was the most influential part of their athletic training education. This reflection of meaningful experiences can be achieved in numerous ways (Rasheed et al., 2019; Tsingos-Lucas et al., 2016), with one of the most supported methods centered around debriefing.

Debriefing is a structured and systematic reflection on an experience to gather lessons learned and to prepare for future experiences (Lee et al., 2020; Roh et al., 2016). In my study, participants identified debriefing as an effective method for reflecting on a distressing event and overall reducing their distress. One student even noted that the debriefing process allowed them to identify errors in their care, supporting the use of the technique in developing self-awareness. Debriefing and experiential learning are codependent—one cannot engage in experiential learning without structured reflection (debriefing), and one cannot debrief without a significant experience (experiential learning). However, there are some caveats that educators should consider when implementing debriefing as a self-awareness strategy.

For debriefing to be effective, the participants must be guided to maintain a mindset that fosters learning and growth (Lee et al., 2020). Without this mindset, the debriefing session can devolve into venting and "trauma dumping," which are unhealthy strategies for dealing with distress (Goleman, 2020). Venting, or emotional ventilation, is expressing frustrations and other negative emotions with others to reduce internal pressure. Like venting in a pressure cooker, the experience focuses on reducing the build-up of negative emotional pressure to potentially reduce the subsequent side-effects of these negative emotions (Bodie et al., 2015). However, research shows that venting is ineffective if the speaker and listener are not viewing the experience as

positive (Bodie et al., 2015; Goleman, 2020). Many participants in my study noted that they used venting to relieve stress, especially when speaking to their peers or individuals outside of health care. While some of these participants noted that these venting sessions helped reduce some of their negative feelings, none of the participants indicated that their feelings of moral distress were resolved using this strategy. Venting can seem easy and cathartic, especially in emotionally heightened situations. Athletic training educators must work to educate students about the fallacy of venting and promote healthy and beneficial debriefing strategies.

Another strategy that programs can utilize early in student progression is the process of growth mindset development. A growth mindset is believing and understanding the potential for growth and learning in any situation (Dweck, 2015; Yeager & Dweck, 2020). For example, many of the participants in my study stated that while they did experience some negative emotions related to distressing events, they took a viewpoint of growth and learning that helped them to reduce the long-term moral residue from the event.

Growth mindsets and critical reflection are integral parts of adult learning as described by transformative learning theory (TLT; Dirkx, 1998; Mezirow, 2003, 2006). This learning theory states that, for adult learning to occur, adults must have disorienting dilemmas and have the opportunity to experiment, reflect, and debrief with others to form meaning (Mezirow, 2006). By fostering the development of growth mindsets and allowing students to debrief effectively, athletic training programs can help students learn and grow from otherwise negative experiences.

However, the difficulty with ascribing TLT to this Framework is identifying whether or not a student is considered an adult learner. Adult learners are self-driven and seek real-world examples from which to learn (Dachner & Polin, 2015). However, learners at the college level are transitioning from traditional K-12 education models and may not have the development or

skills required to fully engage in adult learning (Dachner & Polin, 2015, 2016). If faced with this predicament, educators should focus on fostering adult learning behavior, but this effort may require unlearning to facilitate the paradigm shift necessary for a growth mindset.

Unlearning is a strategy focused on consciously discarding, abandoning, or giving up particular values, knowledge, or behavior (Klammer & Gueldenberg, 2019; Starbuck, 2017). Unlearning differs from forgetting ideas, as unlearning is an intentional action for a specific purpose (Klammer & Gueldenberg, 2019). As an educational strategy underpinning cognitive restructuring, unlearning is loosely based on the educational and learning theories derived by Piaget, Vygotsky, and Dewey, including constructivism and cognitivism (Amineh & Asl, 2015; Ertmer & Newby, 2013; Klammer & Gueldenberg, 2019). At its core, unlearning is the process of intentionally forgetting or giving up previously held knowledge and beliefs to have an open mind to new ideas (Klammer & Gueldenberg, 2019). While the literature on unlearning in athletic training programs is nonexistent, lessons found in organizational psychology literature can still be used to effect change in athletic training students.

Athletic training programs should focus on developing unlearning as a process and skill that students can use in any situation. Individuals do not typically want to unlearn if their previous processes were deemed effective (Klammer & Gueldenberg, 2019), internally or externally. Therefore, students must be shown that their current processes are ineffective for dealing with moral and ethical dilemmas in clinical practice. Using the underpinning educational theories, educators can create lessons, activities, and assessments showing students how their current processes may fail them. For example, an educator could use a problem-based learning scenario to create an ethical dilemma, then use class discussion and debriefing to identify where old processes and approaches to learning may no longer work for students, particularly when

they are autonomous and no longer have the safety net they rely on in clinical experiences. Educators should approach this process gently, as it can be jarring to have beliefs and conceptions challenged. However, if done correctly, unlearning can work to give students the processes necessary to shift their biases and mindset to ones beholden of transformative adult learners (Hislop et al., 2014). As athletic training students progress through the Framework, they will need to rely on a solid foundation of self-awareness and reflection to build resilience to distress and navigate the moral and ethical dilemmas inherent in clinical practice. Therefore, athletic training programs and educators must focus on building these foundational skills in students early and often reinforce these strategies to give students the best possible chance of developing resilience.

Stage 2: Moral Distress

During stage 2, an otherwise distressing event can be interpreted as a morally distressing event, with different implications than typical distress. While general distress can be caused by a variety of situations and external factors, moral distress is a type of distress that develops when an individual is faced with a moral dilemma and, for some reason, cannot make the decision that they believe is right (Jameton, 1984; Morley et al., 2019; Zuzelo, 2007). This perceived lack of agency and violation of personal ideals causes negative feelings and emotions of moral distress (Morley et al., 2019), and the feeling of moral distress is disconnected from the objective truth of the individual's agency.

It is essential to explore this definition more deeply, as three significant points must be met for a situation to be differentiated from general distress and considered morally distressing based on the literature. These factors are critical to the progression through State 2 of the framework. First, an individual must be in a position in which there is ambiguity in the correct

course of action and believe they know the right course of action to take (Kalvemark et al., 2004). This ambiguous situation could occur in any setting, but the situation must be relatively devoid of objectively correct responses or actions. This lack of an objectively correct response, coupled with the individual's belief in what is right, creates moral distress (Kalvemark et al., 2004; Morley et al., 2019). In my study, many participants identified situations in which there was ambiguity about the correct response to patient care. While these situations caused the participant distress based on their understanding of the event, some of these participants did not reach the threshold of moral distress. Being in a generally ambiguous situation can be distressing due to the general uncertainty and anxiety that can occur, and an individual's belief that they know the right course of action is what sets up the potential for moral distress (Kalvemark et al., 2004; Lamiani et al., 2017).

Second, an individual must perceive that an ambiguous situation is moral or ethical for it to cause moral distress (Nejadsarvari et al., 2015). Recognizing the moral or ethical implications of one's actions contextualizes the subsequent negative feeling associated with moral distress. The ability to recognize moral and ethical implications in situations is called moral sensitivity. Some of the participants in my study were able to recognize the moral or ethical ambiguity and dilemma in their clinical practice, helping to make the case that they were experiencing moral distress.

Finally, individuals must perceive a lack of agency in their ability to perform the morally right action to experience moral distress (Epstein et al., 2019; Hamric & Epstein, 2017). The literature identifies some specific categories of causes of this lack of agency, including patient-level, unit/team-level, or organization/system-level (Hamric & Epstein, 2017). Patient-level relates to causes stemming directly from patient care, including stakeholder or family wishes that

conflict with patient wishes. Unit/team-level relates to causes stemming from inter-provider conflict or issues, including peer bullying or miscommunication causing poor patient outcomes. Organization/system-level causes relate to external factors outside the health care team that effect patient care, including administrative policies or initiatives that pressure providers' decisions. While most situations fall into these categories, any situation that causes a perceived lack of agency can contribute to moral distress (Lamiani et al., 2017). Participants in my study noted a distinct lack of agency in action stemming from unit/team-level causes. Many participants who experienced moral distress stated that they felt unable to do the right thing due to either preceptor pressures or stakeholder concerns, citing that they were not the ones making the decision and therefore felt that they could not do anything. Most notably, the majority of participants in my study who experienced moral distress discussed organization/system-level causes stemming from their role as students. Participants noted that they felt that, as a student, they did not have the authority or status to voice their opinions and beliefs.

It is important to note that the definition and accurate characterization of moral distress are complex due to the personal nature of the phenomenon. Even if all three of the requisite factors are met, an individual may not experience negative emotions associated with the event. Conversely, individuals might perceive that they are experiencing moral distress when not experiencing an event that meets these three factors. Some of the participants in my study, while they were able to meet some of the factors for moral distress, were missing critical components that differentiated their general distress from moral distress. For example, some participants noted that they felt distressed when faced with an ambiguous situation but could still provide the care they believed was right. Other participants identified conflicts in their agency to act, but the situation was not morally or ethically ambiguous. These situations, while distressing to the

participant, did not fit the complete definition of moral distress. Throughout this study, I used the criteria for moral distress to categorize participant responses as accurate or inaccurate for this research. However, the individual is the ultimate decider of whether or not a situation causes moral distress. This individual interpretation is why it is critical to developing a solid foundation of self-awareness, as this skill can help individuals evaluate the nuance of these situations more clearly.

Intervention Strategies for Stage 2

Moral distress is an inevitable aspect of health care (Rushton, 2017). As such, intervention strategies should not be focused on trying to remove moral distress for providers. Instead, moral distress can give health care providers clues and insights into situations where they should provide more attentive care to ensure positive patient outcomes. However, this is only achievable if the provider knows a situation's moral and ethical implications. One of the ways to help develop this moral and ethical awareness is to foster the development of moral sensitivity.

Moral sensitivity is the ability to recognize moral or ethical implications in a complex or nuanced situation (Nejadsarvari et al., 2015; Ohnishi et al., 2019). The literature suggests that high levels of moral sensitivity in health care providers improve patient outcomes, possibly due to the provider being better able to address moral or ethical issues in patient care (Ohnishi et al., 2019). Developing moral sensitivity is theoretically straight forward, as best practices indicate that exposure to morally ambiguous situations can help one to develop a sensitivity to them (Stutzer & Bylone, 2018). However, because moral sensitivity is the awareness of the moral and ethical implications of one’s actions, one must also be aware of the moral and ethical standards that are expected of them in a given situation. To achieve this awareness, educators should focus

on teaching field-specific ethics to students.Field-specific ethics training teaches ethical and moral codes, standards, or practice characteristics in any field. Current literature suggests that field-specific ethical education is effective in training students on professional values, expectations, and professional identity (Mulhearn et al., 2017).

In athletic training education, field-specific ethics includes the NATA Code of Ethics, the BOC Standards of Practice, and general medical ethics principles such as autonomy, nonmalfeasance, beneficence, and justice (Beauchamp & Childress, 2001). These concepts are directly related to the concept of patient-centered care. Patient-centered care (PCC) focuses on the interactions between providers and patients and ensuring that health care is responsive to and respectful of patient goals and values (Bensing, 2000; Davis et al., 2005; Redinger et al., 2021). First conceptualized by Henry Picker, PCC encompasses eight domains, including a) respect for patients, b) coordination and integration of care, c) patient information and education, d) physical comfort, e) emotional support, f) involvement of support systems, g) continuity and transition, and h) access to health care (Ortiz, 2018; Redinger et al., 2021). The domains of PCC are directly aligned with medical ethical principles, and education on PCC is health care ethics education. In my study, one participant noted that much of their ethical training focused on the overall development of PCC in their practice and stated that this was an influential aspect of their ethical training. When developing educational strategies for ethics education in athletic training, PCC should be considered an integral part of the curriculum for the benefit of ethics education and the long-term benefit of improved patient care.

Most participants in my study identified that their ethical education mainly focused on field-specific ethical concepts, including PCC. However, many participants noted that, while these field-specific ethical concepts were discussed, they were not given the time required to

conceptualize and apply them in class. One student noted that their program gave them this foundational knowledge but admitted that the foundation had cracks, implying their education was insufficient. Field-specific ethical concepts should be taught early, giving students a strong starting point for developing moral sensitivity in their practice and, frequently, allowing students to apply the concepts to practice. Best practices suggest that this type of ethical training should be taught explicit concepts with reinforcement and scaffolding throughout a curriculum, culminating in experiences where students can actively experiment with moral and ethical principles in real-world situations (Mulhearn et al., 2017; Watts et al., 2017).

Challenges arise when discussing educational strategies for these culminating experiences, however. Exposing students to morally ambiguous and potentially distressing events can be harmful as there is a risk of emotional or psychological harm to the student and the potential for harm to the patient. Educators must use strategies that allow for student experience while ensuring student and patient safety. Some strategies to achieve this include focusing on experiential learning theory, specifically simulation, where one can fail without consequence, and problem-based learning.

As stated previously, experiential learning uses experiences to promote learning and critical thinking (Kolb, 1984). PBL is an educational strategy that uses a problem to promote student learning of a concept or skill (Wood, 2008). The "problem" in PBL should be analogous to what students would feasibly encounter in the real world (Trullàs et al., 2022; Wood, 2008). Students can apply previously learned concepts using real-world problems and experiment with possible solutions in a controlled environment. The goal of PBL should not be to solve the problem but to gain transferable knowledge, regardless of the situation (Wood, 2008). PBL is currently used in medical education to help develop medical competencies and skills in

physicians, nurses, and other providers (Sayyah et al., 2017; Trullàs et al., 2022). In my study, participants identified points in their athletic training program where they experienced PBL, with one student indicating that using in-class scenarios helped them understand ethical and moral concepts. Through PBL, students can develop higher levels of moral sensitivity through experiences of lifelike scenarios in a controlled environment designed for learning.

Integrating ELT and PBL has benefited student learning through standardized patients and simulation, particularly in health care education (Pinar & Peksoy, 2016). Standardized patients are actors trained to consistently and accurately portray a pre-written patient case (Walker & Weidner, 2010). By creating a standardized patient case involving a moral or ethical dilemma, educators can simulate patient interaction experience and allow students to engage in active experimentation in a controlled environment. Simulations are similar to standardized patients in that they are controlled environments (Pinar & Peksoy, 2016). However, simulations are typically designed to emulate a more complex scenario for education and learning (Pinar & Peksoy, 2016). For example, a standardized patient encounter might be a single evaluation, while a simulation might include multiple patients, providers, and settings that require a more dynamic approach to the experience. Some of the participants in my study indicated that their programs used standardized patients and simulations to help develop student ethical decision-making. One student noted that their specific encounter gave them a beneficial experience and helped to solidify her ethical knowledge.

Educators must focus on reflection and structured debriefing when integrating ELT or PBL into a curriculum. Both educational strategies rely on student reflection to facilitate learning and develop concepts (Kolb, 1984; Sayyah et al., 2017). Participants in my study noted that the reflection and debrief are where they experienced the most learning after an educational

experience. Therefore, high-quality reflection and debriefing activities must be incorporated into any problem-based or experiential learning scenario, supporting the importance of these strategies in Stage 1 of the Framework and continuing to foster the development of adult learners.

Athletic training students must develop moral sensitivity. However, high levels of moral sensitivity can lead to increased levels of moral distress (Nejadsarvari et al., 2015; Ohnishi et al., 2019). A positive correlation exists between low levels of moral sensitivity and the presence of moral distress (Nejadsarvari et al., 2015). As stated previously, providers must understand that they are experiencing moral distress, as they can be important indicators of a negative situation, meaning that some level of moral sensitivity is necessary. A positive correlation also exists between high levels of moral sensitivity and the intensity of moral distress, meaning that individuals with high levels of moral sensitivity experience the negative emotions associated with moral distress more intensely. This increase in intensity creates a problem for education; developing student moral sensitivity is vital for ethical practice, but this development also opens students up to a higher intensity of negative emotions. Therefore, a balance must be struck between developing moral sensitivity and ensuring that students take actions that help them cope with moral distress in a healthy way.

Stage 3: The Action

When faced with distress and negative emotions, the human condition attempts to reduce or remove these negative emotions (Baqutayan, 2015). In psychology, these strategies are called coping mechanisms. Coping mechanisms allow an individual to process and deal with negative emotions in a way that preserves the emotional and psychological well-being of the individual. There are numerous mechanisms for coping in the literature, and my study identified the primary

coping mechanisms used by athletic training students to deal with feelings of moral distress. These are debriefing, withdrawal, acceptance, and moral disengagement.

Debriefing

While debriefing was previously discussed as an essential mechanism for developing self-awareness in Stage 1 and crucial for ELT and PBL in Stage 2, it is also vital for coping with negative emotions (Kinzel & Nanson, 2000). In my study, almost every participant noted that they either use structured and unstructured debriefing or venting to help decrease emotions caused by moral distress, with many noting that this strategy was effective. While venting is not as adequate for long-term reduction of distress as debriefing, participants note that it is still helpful in the short term as a coping mechanism. The importance of dedicated time to reflect and debrief cannot be understated when developing ethics education in athletic training students.

Withdrawal

Withdrawal is a coping strategy for dealing with negative emotions studied in the literature (Ubillos-Landa et al., 2021). Withdrawal can be physical and emotional (Aggarwal et al., 2020; Park & Adler, 2003). Participants in my study identified that they used physical withdrawal when faced with morally distressing situations, with some stating that they would leave the clinical care space or remove themselves from the patient care altogether. Emotional withdrawal, or emotional blunting, is less conspicuous than physical withdrawal. Emotional withdrawal is a complex set of behaviors that remove the suffering individual from the situation that causes distress (Aggarwal et al., 2020; Ubillos-Landa et al., 2021). Other participants identified that they used emotional withdrawal as a coping mechanism, focusing on avoidance or distraction behaviors that removed the emotional tension of the distressing event. Current literature suggests that withdrawal is a maladaptive coping mechanism as it does not address the

underlying causes of the distress (Garg & Singh, 2020; Park & Adler, 2003), and my results support this. Participants who engaged in withdrawal noted that their moral distress was diminished but not resolved otherwise. Athletic training education must address unhealthy coping mechanisms in students and educate them about healthy mechanisms, such as debriefing and acceptance, to help promote mental health and longevity in health care.

Acceptance

Acceptance is a coping method in which the individual accepts an unchangeable event to reduce negative feelings associated with said event, thereby maintaining psychological well-being and agency (Nakamura & Orth, 2005). Acceptance allows negative emotions to be processed and reduces harmful rumination about adverse events (Wojnarowska et al., 2020). Active acceptance is when emotions are accepted and addressed constructively (Nakamura & Orth, 2005). In my study, some participants indicated that when faced with situations in which they felt a loss of agency, accepting the reality of the situation allowed them to take action to regain some of that agency. Acceptance can be a valuable tool to help reduce adverse outcomes associated with moral distress.

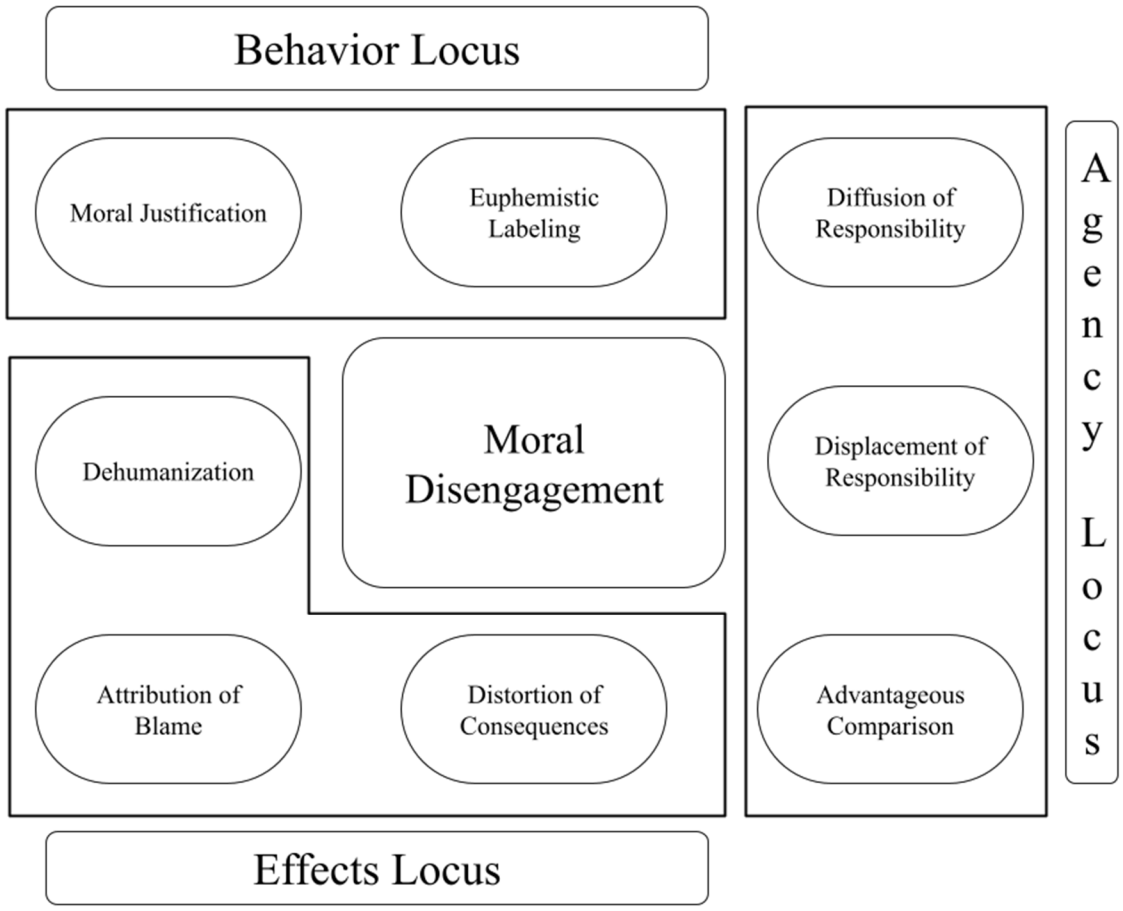
However, acceptance can also be maladaptive, and when increased negative emotions follow acceptance, it is considered resigning acceptance (Nakamura & Orth, 2005). Resigning acceptance can also lead to passivity in other aspects of life, which may exacerbate the perceived lack of agency in patient care. Some of the participants in my study indicated that they had accepted moral distress but were subsequently discouraged from their future in athletic training, believing that they would continue to experience similar situations and distress. Athletic training students must deal with morally distressing situations actively and avoid the adverse outcomes of resigned acceptance.

Moral Disengagement

Moral disengagement is a latent psychological response to immoral action in which one rationalizes the action by manipulating one's moral beliefs to reduce moral self-sanction (Bandura, 2016). Based on social cognitive theory, moral disengagement supposes that individuals are more likely to rationalize their actions by changing the moral context rather than accept the self-sanction of an immoral action (Bandura, 2014, 2016). Moral disengagement has been demonstrated in health care, business, government, and military actions, and there are eight general categories of moral disengagement (see Figure 3; Bandura, 2016). These categories can further be divided into three causal locus groups: behavior, agency, and effects (Bandura, 2016). While each category is slightly different, all represent how an individual could rationalize immoral action.

Figure 4

Concept Map of Moral Disengagement



Note. Adapted from Bandura, A. (2016). *Moral disengagement: How people do harm and live with themselves*. Worth Publishers.

In my study, students' most prominent category of moral disengagement is the displacement of responsibility. Displacement of responsibility is shifting the blame for an immoral action on another or removing one's agency from a situation (Bandura, 2016). Some participants noted this shifting of the blame by stating that the morally distressing patient care was not their responsibility due to their status as students, with many of these participants

directly blaming their preceptor or other stakeholders. By using their student status, other participants removed their agency for action by stating that their opinions were not valued and did not matter. Finally, some participants described the displacement of responsibility by identifying their choices aligned with best practices and the most current evidence, implying that they were not responsible for the outcome.

This prevalence of moral disengagement, specifically displacement of responsibility, is concerning on multiple levels. First, this indicates that the educational system has not educated the students about their responsibility and agency in their clinical rotations. Athletic training students should be held to the same professional, ethical practice standards that they will be held to in their future careers, such as the BOC Standards of Professional Practice and the PCC principles, and their status as a student does not ethically or morally absolve them from immoral action or inaction. While it may be true that their lack of certification protects them from specific legal implications of patient care, this status should not remove the moral and ethical expectations that the profession and health care at large expect from providers, students, or otherwise.

Second, this prevalence of moral disengagement suggests that students are exposed to factors predictive of moral disengagement without the proper resources and education to recognize it. Current literature suggests that moral disengagement is difficult to predict (Budziszewski et al., 2020). However, predictive factors could lead to moral disengagement in health care providers (Budziszewski et al., 2020; Shields et al., 2015). In athletic training, many of these factors are similar to what participants identified as morally distressing events, such as an external coach or stakeholder pressure (Budziszewski et al., 2020). While it is impossible to predict moral disengagement based solely on these factors, it can be reasonably assumed that it is

possible in athletic training, and students are at higher risk due to a lack of training and overall experience. Literature suggests that knowledge alone can effectively reduce the likelihood of experiencing moral disengagement, as it makes individuals more aware of their susceptibility to moral disengagement and of situations in which they may disengage. Education programs must focus on educating students about recognizing the factors that predict moral disengagement and strategies to neutralize those factors.

Intervention Strategies for Stage 3

As students begin to act on their moral distress, they will need self-awareness and an understanding of how they should act in a situation. Field-specific ethics education, as stated previously, can help students understand how to act ethically and professionally (Watts et al., 2017). Education programs should focus efforts to enculturate students into the professional ethics of athletic training, emphasizing their obligation as health care providers, regardless of their student status. Further, programs should consider using the MMD-AT to objectively measure and evaluate student moral distress levels, potentially helping to guide intervention strategies. However, knowing the right course of action may not help reduce the likelihood of long-term effects of moral distress and moral residue, such as burnout and intent to leave the profession (Epstein & Hamric, 2009; Ramos et al., 2016). Through moral resilience, students can learn how to cope with the long-term negative feelings of morally distressing events and reduce the likelihood of the long-term effects (Spilg et al., 2022; Young & Rushton, 2017).

Moral resilience is the development of psychological fortitude and the ability to reduce the otherwise negative impact of moral distress (Lachman, 2016; Rushton, 2017). Higher levels of moral resilience correlate with lower levels of burnout and other adverse effects of moral

distress (Antonsdottir et al., 2022). Athletic training educators can use multiple strategies and approaches to help develop moral resilience in athletic training students.

Research indicates that simple education on moral and ethical norms can help to develop moral resilience (Young & Rushton, 2017). Field-specific ethical training, as has been stated previously in this discussion, is critical to enculturating students into the norms and mores of ethical and moral practice in athletic training. Simply knowing about ethical norms allows students to frame ethical or moral ambiguity into a known pattern of practice, helping to reduce the effects of moral distress (Stutzer & Bylone, 2018; Young & Rushton, 2017). Educators should focus on guiding students towards pattern recognition practices regarding ethical norms, as this will assist in decision-making when intuition is not enough (Thammasitboon & Cutrer, 2013).

Direct exposure to morally distressing situations has also increased moral resilience in clinicians (Monteverde, 2014). Direct exposure allows clinicians to practice and actively experiment with their ethical education (Young & Rushton, 2017), a critical component of experiential learning (Kolb et al., 2014). Repeated exposure to morally and ethically ambiguous situations and moral distress can lead to decreased perceptions of moral distress over time (Monteverde, 2016). When elaborating on their insufficient ethical preparation, some of the participants in my study noted that they wished they had more exposure to clinical experiences that included ethical dilemmas. Many students stated that more exposure would have given them more practice and confidence in their approach to ethically ambiguous situations. While discussing his clinical site as a great learning environment, one student also noted that the sterility of the clinical site from ethical ambiguity was a detriment to learning. This student said he wished he had had a more challenging clinical rotation in his program.

While knowingly exposing students to morally distressing situations can be ethically dubious on the part of the educator, students can also gain practical exposure through standardized patient encounters and simulation (Hancock et al., 2020; Stutzer & Bylone, 2018). Athletic training educators should focus on these experiences to allow students to use professional, ethical norms, experiment with responses, and focus on critical thinking to develop possible solutions to the dilemma. Students should also be allowed to debrief and reflect on their experiences with a growth mindset approach. This way, students can gain much-needed experience without putting students or patients in potentially dangerous situations.

Example of Ethics Education Curriculum

Understandably, the visualization of this interacting content could be challenging, especially in already created curricula in athletic training programs. Many athletic training educators note that, while they would like to increase ethical training in their programs, there is not enough space or time to develop the curriculum (Drescher & Eberman, 2022b). While reasonable, this excuse is not sufficient. To illustrate how this content could be effectively interlaced into an existing curriculum, I have developed an example of a comprehensive athletic training ethics curriculum and its integration into a standard professional-level athletic training program. Using the backward-design approach, the purpose of this curriculum is to show a possible integration of ethics curriculum in athletic training education. Backward design is the process of developing curriculums by identifying the goals and objectives, assessing, and developing the learning activities. This design allows educators to develop activities and assessments directly in alignment with their educational outcomes (Wiggins, 2011). Backward design is the best choice for developing this example curriculum because it helps ensure that the ethics education goals are met through each assessment. This curriculum should be an example,

with edits and changes made to match program uniqueness. The example curriculum can be found in Appendix D.

Framework Summary and Implications

The ultimate goal of ethical training and education should be to build moral resilience and improve ethical decision-making in athletic training students. However, without the prerequisite meta-skills, knowledge, and growth mindset shift, students will not be in a safe place to develop moral resilience effectively. This framework is designed as a visual representation of the development of moral distress, subsequent actions taken to reduce its effects, and the long-term ramifications of those choices. The intervention strategies in this framework are divided into stages where their impact on the student experience is most noticeable.

However, it should be noted that the framework stages do not directly correlate with when these concepts should be taught to students; educators should not wait until a student experiences moral distress to start teaching them. Furthermore, while the framework is in a linear orientation, the application of ethics education is complex and non-linear, with significant overlap between stages. Instead, these concepts should be interlaced into the existing curriculum, using relevant and timely examples to existing coursework, and focused on repetition and scaffolding ideas. Scaffolding effectively develops skills and knowledge in dynamic ethics education curriculums (Song, 2018; Tammeleht et al., 2021). Through this repetition and exposure, students eventually develop moral resilience, the ultimate goal of this education.

Limitations

There are some limitations to this study. The nature of self-report for the MMD-AT presented challenges with accurate and truthful reporting. Students may have felt compelled to downplay their experiences with moral distress, knowing that the survey was not anonymous.

We took precautions to mitigate this limitation by informing students of the voluntary nature of this study as well as allowing students to withdraw from the study as necessary. Further, there is a chance that by knowing the purpose of the study and the MMD-AT, the survey could have created an affect where students were pre-disposed to the ethical nature of the items. To mitigate this, the MMD-AT asks that participants identify both the frequency of the event and the level of distress they felt from the event and combines the scores. In this way, the MMD-AT ensures that perception alone does not indicate whether a participant is experiencing moral distress.

Another limitation to this study was participant sampling. This study used a method of recruitment that relied on athletic training educators to distribute the recruitment material to athletic training students, which could result in selection bias from the faculty of athletic training programs. The research team took steps to mitigate this limitation by including language in the recruitment materials directing program faculty to send the materials to all students in their programs.

Conclusion

Athletic training students experience moral distress and engage in numerous methods to cope with the feelings of distress. While some of these strategies are helpful, many participants noted that these coping strategies did not reduce their feelings of moral distress. Ethics education is one way to help develop positive coping strategies and moral resilience in athletic training students. However, almost all of the participants in this study noted that their ethics education was insufficient in preparing them for their future ethical practice. Through the development of the framework, I have identified a structured approach to the development of moral distress in athletic training students and a set of focused interventions designed to help educators implement effective ethics education. Athletic training education must continue to innovate and develop

more effective ethics education strategies to meet the needs of the students. Moral distress is inevitable in health care, and students can develop the moral resilience necessary to deal with and recover from the adverse outcomes of moral distress through effective ethics education.

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APPENDIX A: MEASURE OF MORAL DISTRESS FOR ATHLETIC TRAINERS (MMD-AT)

Moral distress occurs when professionals cannot carry out what they believe to be ethically appropriate actions because of constraints or barriers. This survey lists situations that occur in clinical practice. If you have experienced these situations they may or may not have been morally distressing to you. Please indicate how frequently you have experienced each item. Also, rank how distressing these situations are for you. If you have never experienced a particular situation, select "0" (never) for frequency. Even if you have not experienced a situation, please indicate how distressed you would be if it occurred in your practice. Note that you will respond to each item by checking the appropriate column for both dimensions: Frequency and Level of Distress.

	Frequency				**Level of Distress**			
	Never			Very frequently	None			Very distressing
	0	1	2	3	0	1	2	3
1. Witness health care providers giving "false hope" to a patient or family.								
2. Follow the family's or support system's insistence to continue further treatment even though I believe it is not in the best interest of the patient.								
3. Follow a physician's, family members, or support system's request not to discuss the patient's prognosis with the patient.								

4. Participate in an environment that gives inconsistent messages to a patient, family, or support system.								
5. Required to care for patients who have unclear, inconsistent treatment plans or who lack goals of care.								
6. Being asked to order or carry out orders for what I consider to be unnecessary or inappropriate tests and/or treatments.								
7. Continue to provide aggressive treatment for a patient who is most likely not going to recover when no one will make a decision to withdraw it.								
8. Feeling required to care for patients whom I do not feel prepared or qualified to care for.								
9. Participate in care that I do not agree with but do so because of fear of legal action or influence from extraneous sources.								
10. Letting patient care suffer because of a lack of provider communication or continuity.								
11. Unable to provide optimal care due to pressures from administrators, parents, or other stakeholders.								
12. Feel pressured to avoid taking action when I learn that another colleague has made a medical error.								
13. Witness a standard of practice or a code of ethics violation and do not feel sufficiently supported to report the violation.								
14. Feel pressured to ignore situations in which patients have not been given adequate information to ensure informed consent.								
15. Experience lack of administrative action or support for a problem that is compromising patient care.								
16. Experience compromised patient care due to lack of resources, equipment, or facility capacity.								

17. Required to work with other health care providers who are not as competent as the patient care requires.								
18. Being required to care for more patients than I can safely care for.								
19. Having excessive medical documentation requirements that compromise patient care.								
20. Work within power hierarchies in teams, units, and the institution that compromise patient care.								
21. Work with health care providers who do not treat vulnerable or stigmatized patients with dignity and respect.								

Measure of Moral Distress for Athletic Trainers (MMD-AT) Scoring

The MMD-AT is a validated tool for use in athletic trainers based on the Measure of Moral Distress – Health care Professionals. You should review it carefully to ensure that it is appropriate for your study or project. If you decide to use the MMD-AT, please include the full citation of the article in your reports or publications.

This tool is suitable and has been validated to measure frequency and perceptions of moral distress within athletic trainers.

The MMD-AT's scoring procedure is designed to measure current levels of moral distress. To generate a composite item score, multiply the frequency score and distress scores for each item. Each item product will range from 0 to 9. This scoring procedure will eliminate items in which the participant scored "0", giving a better representation of current moral distress. Add all item product scores together to create a composite score. This score will range from 0–189, with higher scores indicating higher levels of moral distress.

APPENDIX B: INTERVIEW SCRIPT

Moral Distress and Ethical Preparedness In Athletic Training Students

Date: _____ **Time In**: _____ **Time Out**: _____

Digital File Number:_____ **Interview Length**: _____ **Participant ID**: _____

Thank you for taking the time to meet with me today. This interview will take roughly 30 minutes, where I will ask you a number of questions.

This study has been deemed exempt by The Intuitional Review Board at Indiana State University. Any information you provide during this interview will be help confidential. Please feel free to share openly and freely, anything you share will not be linked back to you. If you feel uncomfortable at any point during the interview, you have the right to stop and will be withdrawn from the study. If you would like to withdraw after the interview, please do so within 15 days from today. At this time do you have any questions?

With your permission I would like to record the interview to ensure your response in clearly captured. Do you consent to participating in this research? Do I have your permission to record the interview?

Before beginning, a quick reminder, **the purpose of this study** is: to examine your experiences and perceptions of moral distress as well as gain insight into how you were taught about ethics in your athletic training programs. For reference, morals are the personal guiding principles and beliefs that govern an individual's actions in a given situation; ethics are the general, combined moral guidelines of a society; moral distress is defined as the negative psychological state that occurs when an individual knows the right thing to do but for some reason is unable to do it due to constraints outside of the individual's control.

Demographic Questions

1. What is your age?
2. What is your gender identity?
3. What is your cultural ethnicity?
4. Tell me a little about your program. Where are you in your studies?
5. What previous clinical experiences have you had? What about your immersive experience? What setting or patient population are you currently working with now?

Interview Script

1. In the opening statement, I provided a brief definition of morals and ethics. What do "morals and ethics" mean to you?
    a. In what ways, if any, does that influence you as a future health care provider?
2. In the opening statement, I provided a brief overview of moral distress. As a reminder, moral distress is the negative psychological state that occurs when an individual knows the right thing to do but for some reason is unable to do it due to constraints outside of

the individual's control. Could you describe a time that, as an athletic training student, you experienced feelings of moral distress in clinical practice?

3. In what ways, if any, have feelings of moral distress affected you?
    a. As a student?
    b. As a person?
    c. As the athletic trainer you want to be when you are certified and state credentialed?
4. Could you describe what strategies, if any, you use to cope with feelings of moral distress as an athletic training student?
    a. In what ways, if any, does your athletic training program teach you to cope with that stress? What kinds of resources do they provide you?
5. In what ways, if any, has your program taught you to address moral and ethical dilemmas in clinical practice?
    a. How so? Could you elaborate on that?
6. In your opinion, has your program has prepared you to address the moral and ethical dilemmas present in clinical practice? How so? Or why do you think?
7. In what ways, if any, has your clinical experiences taught you to address moral and ethical dilemmas in clinical practice?
    a. How so? Could you elaborate on that?

8. In your opinion, have your clinical experiences prepared you to address the moral and ethical dilemmas you've seen in clinical practice? How so? Or why do you think?
9. Moral resilience is the ability to maintain psychological safety and reduce the negative impacts of morally distressing events by using coping strategies. In what ways do you think that your program has helped you develop your moral resilience? How so?
10. Is there anything else you think is important for me to know concerning your ethical preparation in your athletic training program?

Thank you for taking this time to meet with me. Your responses and information provided have been extremely helpful. I will be sending you a copy of the transcribed interview once they are done. Please read over the conversation and check for accuracy. If there are any clarifications or updates you would like to make, that would be the time to make those changes. Your participation is greatly appreciated. Thank you!

Field Notes:

APPENDIX C: REPRESENTATIVE QUOTES

Domain/Category	Quote
Moral Distress	"I'm dealing with a softball player that has 2 herniated discs and nobody has pulled this athlete, and I'm having a really hard time watching this athlete continue to pitch. And hearing her talk about her legs going numb, and just wanting to be comfortable, not being able to sleep at night, and [the medical staff] keep trying to find ways to put Band-aids over her injury instead of looking at her as having a long-term life outside of this… I just feel helpless, and I keep trying different treatment techniques, but really the best way to help her is to give her rest" **-Pascal**
Accurately Described	"There was a patient, I believe their pronouns were different then they were, like, assigned at birth. And I heard the nurse go in, take care of the patient, and then, like the second [the nurse] came out, it was a lot of kind of just like discrimination, based on that fact. Just saying things that I wouldn't expect health care professionals to say to about a patient, or just about any human. And I just had to sit there. I couldn't really get out of this situation. I could, like, see how they kept going back into that room, so I could tell that patient was not having a good experience, so it made me feel that there was nothing I could do about

	it, and that's not how I'd normally like respond to situations like that." **- Locke**
Moral Distress Accurately Described	"We had an athlete who had fever and was generally just unwell. The same athlete also had a metatarsal break in a foot. This was brought to my attention. However, the football game was a high stakes game, so he was allowed to play. [The athlete] was also given like a steroid shot before the football game to help with the fever and other things. And to me it felt like the game was more important than the overall athletes health. So that did not sit well with me." **- Epictetus**
	"I think for me a time that I experienced this where it really bothered me was when I witnessed an athletic trainer withhold all the information from the doctor to the athlete, because they felt like it was for the best interest of the athlete. But I mean, even in the NATA Code of Ethics, it states that we are required to inform all of our patients, and so, observing that, and then, seeing how the athlete was even questioning that, I think that was really hard for me to witness, because I felt very hopeless or helpless as a student. I think it's because that preceptor to student relationship of feeling like you don't want to burn a bridge. You want to respect your preceptor and their decision...so saying something to them, and even like when you challenge them afterwards. it doesn't really seem like your point gets across, or like you are almost like irrelevant like what you said doesn't matter, and that's kind of why I felt a little bit hopeless." **- Mill**

Moral Distress Accurately Described	There was a time actually this semester where we had a patient who had a concussion that had them get an MRI, and also notice that they had a bulging disc. From that, [the athletic trainers] were just treating it as like a normal concussion, and I don't feel like much attention [was] paid to, like the bulging disc, and the patient went out to practice um two days later, and I just felt like we weren't caring at that moment for the patient." **- Descartes**
	"There's been a couple of instances more specifically within my immersion experience in the industrial setting, where I felt that I was under a little bit of a moral distress. Not necessarily pushed to act one way or the other in this particular instance, but my inability to do so within the industrial setting. What a lot of people don't know about it, or they come to find when they go into [an industrial setting], is that there's a lot of red tape or things that hold you back from being able to provide your utmost level of care that you know how to provide. And it was very frustrating knowing that I have the tools in my belt with what I've been educated on this far that I couldn't work as effectively as I knew I could. But if I can do something, and I am certified to do so, it's frustrating to have to jump through a bunch of hoops, to be able to do my job or not even be able to do it in certain capacities because of that red tape." **- Plato**

Moral Distress Inaccurately Described	"An athlete went down on the football field and was face down and was not moving. So we ran from the sidelines out to the player, got to him, and he was unresponsive at the moment in which we got there. At that point he became somewhat responsive, and said that he could not feel his legs. Knowing that the correct thing to do, because I was closest to the legs, was to start testing his sensation and ability to feel his legs, something I knew I needed to do, but was in that moment unable to do . . . I ended up having to step away for a second to calm myself . . . In my mind, it was knowing that the inability to make a decision . . . that was perfect for the situation was already going to have me, in my mind, in hot water with my program. But also that in that moment I just could not comprehend that I should start testing his legs for sensation." **- Machiavelli**
	"We had a patient that he would come in very often to do his rehab and prehab, and things like that. And he was just very diligent about it, so we didn't pay attention like to him for the most part. And then he, a couple of weeks later, retears his ACL. And so that kind of gives me like, 'what could have we done better?' I've been thinking about that a lot, so I guess that would be probably something like me and my preceptor, how could we have changed that." **- Aristotle**

Moral Distress Inaccurately Described	"We talked about how [contrast bath therapy] is not really effective for, like, our purpose of any kind . . . even my preceptor believes that, too. But the coach of the team that I was with really heavily believed in [contrast bath therapy]. So we did contrast baths all the time, and, like it was, it was required for all of the athletes. And there were even some athletes that didn't love it, but they were required to do it. That's one that comes to my mind just because yeah, we didn't think that it was doing anything. We know it's not really doing anything, but the coach really believes in it." **- Heraclitus**
Dealing with Distress Withdrawal	"I would maybe meet with friends and just kind of relax with friends. I guess I don't really have a coping strategy." **- Epictetus**
	"I always have in the back of my mind like I don't want to come in like with an elevated mood...so, like I kind of give myself, like time to let my body like calm down...I just try to focus more on what I can control and, like focus on, like myself, and use a lot of like distraction, until, like I feel in a place that I can like, really deal with whatever the situation is." **– Kierkegaard**
Dealing with Distress Withdrawal	"I just, I take a step back. Everybody thinks they're doing what's right to help somebody, and at the time I will speak up just because I can't keep my mouth shut sometimes. And I just try to do it in a

	professional manner. And then, if it becomes a point where I could feel that it's just more of an argument rather than them trying to hear my side and me trying to hear their side. That's when I usually just step back and just be quiet, regardless of where the conversation is at the time." **- Socrates**
Dealing with Distress Moral Disengagement	"One of the biggest things, I think, is, it's more so an evaluation that I was like observing. I wasn't like the initial person to deal with that athlete, so I just didn't feel like it was my place to be like, you know, like if I'm watching and I'm getting same sort of reads and ideas, and I can tell where my precept is going with their evaluation, and then they don't end up disclosing some stuff, I just feel like that's not necessarily my place to just like jump in in the middle of it, you know . . . in those situations, it's just . . . I just feel like it's not my place to say. I kind of remind myself that it's not my license that's at risk, because I'm just there learning and stuff. So I try to take it as where the learning opportunity comes from, and knowing that I ultimately will not get in trouble if something goes wrong, and that seems to sort of allow me to get a little ease with some [morally distressing] situations." **- Aquinas**
Dealing with Distress Moral Disengagement	"I mean, knowing that my clinical decisions are based on research and best practice. And people outside of the relevant health care realm can't pressure my decisions because I'm making them for good reason." **- Hobbes**

	"I guess it's more of like my opinion, like in those morally distressing situations. What I have to say doesn't matter, because I'm not certified. And because I don't have so many years, so I don't know what's best, even though I feel like it's wrong like in the situation . . . like, if I spoke up, no one was going to listen to me." **- Hume**
	"I didn't really have like a lot of like power in that situation, so like I just trusted that my preceptor is going to handle it, and kind of like had that, like, external locus of, like, somebody else has to deal with this, and I can learn from it. But I'm not gonna like. I purposely like didn't try too hard to like, embody the stress that my preceptor was feeling." **- Kierkegaard**
	"So it's like as long as I'm doing my job right, I can't necessarily count for all the other athletic trainers in the world...I've banked on my own education, how I learn and absorb the information and know what I'm learning. And then I'm applying it...it's technically not my patient. I'm learning from, you know, my preceptor so kind of off-putting the blame." **- Plato**
Dealing with Distress Acceptance	It's forgiving myself for the lapse . . . I guess, forgiving myself for the anger of knowing that was a moment of moral distress that I couldn't help that happened, and that I have to be okay with the fact that it did happen, and that for that moment I had to take a step back, or I had to breathe, or I had to remind myself that it's okay, in order to move

	on...I feel as if I need to punish myself. So it's a need to release that as a form of, I guess as a form of selfish self-acceptance." **- Machiavelli**
	"Sometimes it is what it is, and there's nothing that I can do about it. So kinda coping through the way of, "[the situation is] going to work out this way, and I'm going to have to work around that and do as much as I can through the way it's working out." **- Aristotle**
	"There's nothing that really will ever take away my full moral distress. I still think about that situation to this day, and it occurred really early on in my semester, and it will probably be something that I'll take with me through the rest of my career." **- Camus**
Dealing with Distress Debriefing	"I have gone to my preceptors and just kind of talk to them about [morally distressing] things and then my program, the clinical coordinator for my program . . . I would be more comfortable going to them and talking through those experiences with them as well. And I know my University specifically offers counseling as an onsite counselor that I could go to if there was ever a need for me to go in and get counseling for an event" **- Marcus**
Dealing with Distress Debriefing	"Being able to actually talk about [distressing events], and kind of like, see it back, because that's been the most helpful. **- Hume**
	"Casual conversations with my preceptors. When we're slow, I'll just ask them questions about how they deal with certain things. Like, we had a lot of emotional distress in some of our teams, and I was just curious of like how my preceptor handled that personally. Because I

	found that emotionally distressing, and I didn't know how I was supposed to outwardly express that. And so, being able to ask them questions along the same lines of ethics, and how they kind of cope with different things that come with the job." **- Heraclitus**
	"I can come back and just see what everyone else thinks of the [distressing] situation, and to see how everyone else handles it. I know personally for me, I like to see multiple different sides and opinions to it, so pretty open minded about that stuff. So I mean, for me, that's pretty helpful and beneficial, is being able to be comfortable to bring it back and say, 'this is what happened. This is how the AT handled it, like, what do you guys think?' I'd say, not because the preceptor handle it wrong, but I think it's interesting to get other people's take." **- Hawking**
Dealing with Distress Debriefing	"I do like I feel like my professors are very open, and like I have to talk to them about stuff. And I think they like create that environment where it is like it's like a two-way street like we can converse about these things and like we want to talk about it." **- Cato**
Educational Preparation Field-Specific Ethics	"I think to me like is like as a health care professional, you always want to provide the best quality of care, and, like you want to do what you think is in the best interest of your patient . . . but at the end of the day too, like as health care professionals, you also have to recognize

	that if the patient wants something like you can't just ignore that just because you don't think it's in their best interest. Because, like, if they like, if they want to play, and we put them through a bunch of like tests before the game . . . we can't say no, especially when, like a parent is involved, and it's a minor. So it's hard to like balance that. And so, you have to balance what you think is best for the patient, and I want to do that. But I also know that, like if a patient is interested in like the modality that I haven't tried, or they really want to be able to play, and at the end of the day . . . you can't just draw the line and say no without listening to the patient. And so like, to me, I view myself as like a clinician who wants to balance what a patient wants and what they maybe don't know that they need or, like, can't see the long term implications" **– Kierkegaard**
Educational Preparation Field-Specific Ethics	"We do have a class in our second year. That is, it's called professional practice. And it's all like around like code of ethics, and like I mean, there's like budgeting and stuff in there, but there it's like a big part of it is talking about like the code of ethics and kind of just your like the requirements that we have to follow as just like athletic trainers." **– Cato**

	So we took an organization and administration class in your first year, and that is where we really hit a lot of those topics about like moral stuff. Because a lot of that becomes like a legality situation. So you have like insurances and HIPAA and all that stuff. So it ties in really nicely with those ethical situations that might come up." **– Marcus**
	"I would say our first, one of our first courses. . . . it was basically focusing on research. But within that research also how to find what's best for the patient. So evaluating [research], not only from what you know what might be best as far as the scientifical purpose. But like, what does the patient, what's their goals? What are what are they feeling and kind of using that kind of a ethical and moral judgment." **– Socrates**
Educational Preparation Field-Specific Ethics	"I think what our program a lot of times does is they realize that there's only so much that like that, you know, formal education reading out of a book being lectured on it can teach you a lot of it is like you have to figure [out]. You have to be put in situations where you can safely figure it out for yourself. . . . We had like a capstone exam. And one of those was dealing with a patient that you had referred, or something, and then, like having been cleared by a doctor or by one of the doctors, but then have like gone doctor shopping and

	got cleared by a different doctor for whatever was wrong with them. And so then you had to kinda figure out how you're going to deal with that. It was kind of cool, because, like you got to start as like doing the email. And then the situation was presented. Of what had that had happened?" **- Aquinas**
Educational Preparation Problem-Based Learning	"It's kind of more when we learn about a subject, and it comes up like we talked about like critical incidences and how to deal with that stuff. And we've talked about, like, what you want versus what the team physician wants to do, and like, how to deal with those situations." **- Hume**
Educational Preparation Problem-Based Learning	"We do have a class talking about professional development. And in that, we had a 2 day lecture speaking specifically about ethics and the dilemma of it, and like what different things have occurred. We even went through some different scenarios we've all experienced as students, and so that was really beneficial to better understand." **- Mill**

	"I do think that, all in all, the simulations that we have...or the SP encounters that we have, I do think they are influential, and they do help. It just depends on what the scenario is." **– Camus**
	"Just by like us, watching our preceptors and professors, but also like having conversation with them, or, like, say you have a situation, and then you talk to them after, and ask about it, and like talk through it of like, maybe, 'Why did we do it this way? Could we have done it this way?' and so like just having those conversations similar to how you would approach a lot of other things when it comes to like the student-preceptor relationship. But in terms of like the morals and ethics, especially if it's something that kinda sent up a like red flag for you, like 'Oh, I'm not sure that I would necessarily address it this way. So let me ask about it, because it's making me question it." **– Cato**
Educational Preparation Experiential Learning	"I was with one of my preceptors, and we're just driving on the road, and we came across to the car accident, and like a woman is on the road and she's like some people are doing CPR on her. Another little girls across the street, and she pulls over and she gets out. You don't have to get out, but like i'm gonna get out and try to help. And in that moment like, yes, [my preceptor] told me I didn't have to get out of

	the car with him, and I'm trying to hype myself up to get out the car. But it's also like, I knew that if I got out the car, I would be more equipped to deal with something that's scary in in the future that I do come across. . . . I think that was a scary and valuable moment for me to at least step out and help where I could before. It's like if it's just me and an athlete somewhere, and they get hit, and I'm now the only one there like, now I've done it." **- Descartes**
	"I still believe it would be more beneficial to have [ethics education] in the clinical experience setting rather than the classroom. And this is because in the classroom...it is very easy to teach and to preach on perfect world scenarios, and know exactly what should be done. And while that is beneficial when you get out to practice, there's certain limitations that you have to overcome that can't be taught in a classroom." **- Epictetus**
Educational Preparation Experiential Learning	"I did a simulation, we did do like an emergency care simulation, and I remember everything, like everything that was said to me. Everything. I didn't do pretty well, because I was like so nervous and profusely sweating and like...I was so nervous, so it felt real. So I think [ethics education in clinical experiences] would definitely be more than in the classroom setting. It would be more beneficial or impactful." **- Locke**

	"Being able to watch my preceptors as they handle certain situations [has been beneficial]. And then, after that situation is over, being able to ask questions, or for them to kind of drive a conversation about why they did it that way, and what like, what kind of things they're trying to do, like, what they're trying to accomplish. Yeah, I think that's very beneficial in like learning how to deal and cope with cope with these things are just there." **- Heraclitus**
	"I know that the first several years of practicing will also be really pivotal too. So I'm hoping for to learn a lot from those, too. I'm not going to downplay anything from the program. I definitely think we got a little bit, I mean but I think I'll learn a lot in actually being in the practice or in the field." **- Seneca**

Educational Preparation Growth Opportunities	I would say, I wasn't as aware, because ultimately I grew up in my little bubble, and I was pretty lucky . . . I'll never understand the situations some of these athletes have to go through, because I have somebody in my corner at the end of the day, and some people, their sport is all they have in their corner at the end of the day, and I was lucky enough to not have that, and this profession has made me realize that some people just need a lifeline outside of athletics or outside of their sport." **- Pascal**
	"I think that as a student I'm kind of like 'growing up' a little bit and telling myself like, 'What's bothering you?', or even ask a question to say, 'Hey, like, what's our approach with this person?' Or, you know, just kind of get an idea and be a part of the planning, instead of just being part of the being told what to do. **- Descartes**
	"I wouldn't say it wasn't a bad experience. It was. I think we all need to have experiences like that to know how we want to act, and who we want to be in the future." **– Hawking**

	"I feel that we have not really been truly prepared for that situation. We have dealt with dealing with athletes that may have mental health issues, and how to deal with that. But never more so dealing with, maybe a preceptor or a co-worker, that is doing something that we probably don't believe in that is right. We've been more so taught like, "believe the patient" and what they're telling us, but never like . . . clearing an athlete to play when you know it's probably not the right decision to do. I haven't really had like that conversation. Even though I think that it's really important." **– Epicurus**
Educational Preparation Insufficient Preparation	"I would have preferred that [ethics] class being in person because I think some of the material might get glossed over. It's because it's online, and I don't have actual opportunities to maybe practice like, for example, in in my mental health class that I took, or behavioral health class . . . that was in person. So, I got to kind of work through situations, for maybe, like, a crisis that came through with my classroom. So I feel like It does a little bit of a disservice being an online class." **- Seneca**
	"I can't recall an instance in which we've sat down and had a specific conversation about moral dilemma within any of the courses that I've taken so far." **- Plato**

	"I think that [the program] has provided a foundation that has cracks in it that I will fill throughout my first couple of years of clinical practice. I think that they touch on some aspects of dealing with moral distress, but not to the effect that I feel that they should… I would say a quick. 2 min talk on it, and that was all that my program really went into."-- **Machiavelli**
Educational Preparation Insufficient Preparation	"Honestly, I don't think it's something that's thought about a ton. We currently have a lot of collegiate clinical sites. The decision is being made between the athletic trainer and the athlete, or maybe one doc or or 2 docs, but you don't really deal with parents at all. I guess I really haven't seen a ton of, like, there have been phone calls to parents or that sort of stuff where it's, like, 'hey, your kid has a concussion. This is what we're going to do. This is what you should do at home.' There hasn't really been a ton of kick back, so I haven't really seen any of that. In learning to deal with that, I would say...it should be more inter-worked in our education." **- Hobbes**

APPENDIX D: EXAMPLE CURRICULUM

Programmatic Ethics Curricular Framework			
This framework is designed to outline the integration of specific ethics education in a standard professional-level athletic training program			
Desired Results			
Programmatic Goals	Established Systematic Objectives	Established Course Objectives	Transfer
PG1: Demonstrate evidence-based practice	SO1.1 Summarize the code of ethics and standards of professional practice as outlined by the NATA and BOC	CO1.1 Identify the NATA Code of Ethics and the BOC Standards for Professional Practice CO1.2 Demonstrate ethical decision-making in regard to emergency medical care	Students will be able to independently use their learning to… • Apply critical thinking and metacognitive strategies to evaluate ethical situations in personal and professional lives. • Develop healthy coping strategies for dealing with distress • Approach difficult situations in a constructive and useful way. • Provide patient-centered care for all patients

PG2: Develop professional responsibility in clinical practice	SO2.1 Demonstrate aspects of patient-centered care and patient-centered clinical reasoning SO2.2 Examine potential biases in regard to patient-centered care principles SO2.3 Examine the potential for moral and ethical issues in clinical practice	CO2.1 Discuss the importance of patient-centered care in the evaluation, treatment, and management of illness and injury CO2.2 Analyze the ethical implications of research and evidence-based practice in health care CO2.3 Evaluate clinical decision-making in regards to ethical dilemmas and ambiguity	Meaning	
			Understandings • The importance of ethical decision-making on patient care • Risk associated with moral distress and moral disengagement • Effect of moral resilience on mitigating moral distress	Essential Questions • Is what I am doing the right thing? • Are my care decisions being influenced by bias? • Are my coping strategies working to mitigate my feelings of distress? • How do I ensure that I am practicing ethically?

PG3: Engage in patient-centered clinical exam and diagnosis	SO3.1 Assess the impact of ethical and unethical decision-making in clinical practice on patient care and professional identity SO3.2 Question the effectiveness of coping mechanisms on distress relief SO3.3 Identify internal and external factors that may contribute to moral distress and ethical decision-making	CO3.1 Identify potentials for ethical ambiguity in clinical assessment and treatment CO3.2 Reflect on the clinical implications of an ethical dilemma experience CO3.3 Evaluate current use of coping mechanisms to deal with distress in clinical practice	Acquisition of Knowledge and Skill	
			Students will know… • Metacognitive and critical thinking strategies that can be applied to clinical practice. • How to identify risk factors for moral distress and moral disengagement	Students will be skilled at… • Identifying potential ethical dilemmas in clinical practice • Creating policies and procedures to support clinicians in clinical practice Developing mitigation strategies for moral distress and moral disengagement

PG4: Demonstrate effective strategies for psychosocial intervention	SO4.1 Demonstrate consistent patient-centered care in clinical practice with focus on SDOH and ethical practice. SO4.2 Analyze risk of moral disengagement based on internal and external factors SO4.3 Develop strategies to mitigate risk factors for moral disengagement in clinical practice	CO4.1 Evaluate effectiveness of integrating patient-centered care into practice CO4.2 Evaluate the ethics of the role of the athletic trainer in the social determinants of health for patient health promotion CO4.3 Identify risk factors for moral distress based on internal and external factors in clinical practice		

PG5: Examine future practice as an athletic trainer	SO5.1 Judge the effectiveness of policies and procedures in athletic training practice SO5.2 Demonstrate moral resilience when faced with moral distress SO5.3 Examine future clinical practice and outlook for the future	CO5.1 Design a policy and procedures manual that addresses the legal implication of moral disengagement and moral distress in clinical practice CO5.2 Demonstrate ethical practice in real-world scenarios that aligns with professional ethics standards CO5.3 Demonstrate behaviors of moral resilience		

Evidence		
Code	Evaluative Criteria	Example Performance Task
PG 1 SO 1.1	Problem-solving skills Thoughtful Questioning Effective Summarizing Recognition of behaviors requiring affirmation or correction Active Listening	Students will review the NATA Code of Ethics and the BOC Standards of Professional Practice and reflect on the implications of ethical practice (CO 1.1) ATTRN 651 Students will practice emergency management skills and reflect on the ethical considerations of emergency care (CO 1.2) ATRN 652

PG 2 SO 2.1 SO 2.2 SO 2.3 SO 3.1 SO 3.2SO 4.2		Students will engage in discussion on the principles of patient-centered care and reflect on how they view its relation to ethical practice. (CO 2.1) ATRN 710 Students will create pros and cons list identifying the nuance of the application of EBP and discuss in class. (CO 2.2) ATRN 735 Students will perform a practice analysis of patient interactions and discuss ethical implications of clinical care with preceptor, then reflect on this experience. (CO 2.3) ATRN 750

PG 2 PG 3 SO2.1 SO 2.2 SO 2.3 SO 3.1 SO 3.2 SO 3.3 SO 4.2		Students will perform an SP encounter requiring the evaluation of an orthopedic injury and will debrief about the implications of their decisions and actions (CO 3.1) ATRN 720 Students will be given an ethical dilemma scenario and discuss possible therapeutic treatment modalities and their implications in class (CO 3.2) ATRN 775 Students will reflect on a recent distressing situation in clinical practice and identify the coping methods they use to deal with distress. Students will then discuss with a preceptor/mentor. (CO 3.3) ATTR 760

PG 2 PG 4 SO2.1 SO 2.2 SO 2.3 SO 3.1 SO 3.2 SO 3.3 SO 4.2 SO4.3		Students will perform an SP encounter evaluating their integration of patient-centered care in a complex rehabilitation case (CO 4.1) ATRN 776 Students will discuss their ethical decision-making after the completion of a disqualifying condition mini-encounter (CO 4.1) ATRN 730 Students will develop a public health intervention plan and evaluate the ethical responsibilities as well as the role of athletic trainers in public health (CO 4.3) ATRN 765 Students will perform a risk-analysis of their clinical practice to identify potential risk factors associated with moral distress and moral disengagement and develop strategies to mitigate those risks (CO 4.4) ATRN 770

PG 2 PG 4 PG5 SO 2.1 SO 2.2 SO 2.3 SO 3.1 SO 3.2 SO 4.1 SO5.1 SO5.2 SO5.3		Students will develop a policy and procedure manual for a mock clinical site and peer-evaluate for ethical consideration (CO 5.1) ATRN 790 Students will engage in a semester-long simulation regarding a legal malpractice suit focused at their practice and incorporating their developed policies and procedures manual (CO 5.2) ATRN 798 Students will engage in a debrief on clinical practice with preceptors/mentors focusing on their moral distress, reaction to moral distress, and outlook for the future of the profession (CO 5.3) ATRN 780

Standard Masters in Athletic Training Program Curriculum					
43 credits					
Summer I					
ATRN 651	Athletic Training Topics	3			
ATRN 652	Advanced Emergency Care	3			
	Total Credits	**6**			
Fall I			*Spring I*		
ATRN 710	Orthopedic Assessment I	4	ATRN 720	Orthopedic Assessment II	5
ATRN 735	Evidence-Based Practice	3	ATRN 775	Therapeutic Modalities	2
ATRN 750	AT Clinical Experiences I	2	ATRN 760	AT Clinical Experiences II	2
	Total Credits	**9**		**Total Credits**	**9**

Fall II			*Spring II*		
ATRN 776	Therapeutic Exercise	3	ATRN 790	Administration and Professional Development	3
ATRN 730	Non-Orthopedic Assessment	3	ATRN 798	AT Capstone Seminar	2
ATRN 765	AT Prevention and Health Promotion	2	ATRN 780	AT Clinical Experiences V	4
ATRN 770	AT Clinical Experiences IV	3			
	Total Credits	**11**		**Total Credits**	**9**