ENHANCING UNDERSTANDING THROUGH SELF-AWARENESS: A MEDICAL HUMANITIES APPROACH TO INCREASING PRACTITIONER SELF-AWARENESS AND STRENGTHENING PATIENT CONNECTION

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Briana Tierno

Drew University

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ABSTRACT

Enhancing Understanding through Self-Awareness:

A Medical Humanities Approach to Increasing Practitioner Self-Awareness and Strengthening Patient Connection

D.M.H. Dissertation by

Briana Tierno

The Caspersen School of Graduate Studies

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ABSTRACT

This dissertation examines how experiential humanities practices can enhance interpersonal skill sets to assist healthcare learners in gaining a more authentic understanding of their patients' needs and wishes. A review of the literature that addresses attunement, compassion, and adaptability as tools for communication and comprehensive understanding is provided. Experiential and contemplative practices that have been proven to enhance these skills in practitioners, including medical improv, meditation, and narrative medicine are also discussed.

A qualitative analysis of an IRB approved study, *Medical Improvisation, Narrative Medicine, and Contemplative Practices in a Health Education Training Environment: A Medical Humanities Approach to Increasing Self-Awareness and Strengthening Interpersonal Connection* (Study # 004892), conducted for the purpose of this dissertation is included. The objectives of the study were to determine if a Medical Humanities curriculum containing mixed strategies of artistic and contemplative practices combined with group discussion and reflective journaling can increase pre-health scholars' self-awareness and to investigate the ways in which increased self-awareness can improve understanding of and enhance compassion for patients' perspectives

and articulated desires. The study was broken into three, two-hour sessions which centered around the themes of Attunement, Compassion, and Adaptability. Findings of the study, examined through a qualitative analysis of participants' written reflections and post-study interviews, indicate that the practices of theatrical improv exercises, mindfulness meditation, and reflective writing are useful tools to guide health learners toward enhanced self-awareness and an ability to build authentic connections with patients. Although the sample size of ten participants was small, the research presented aims to inform suggestions for future research in the field of Medical Humanities and provides specific examples of exercises and justifications of how they might enhance clinical education.

In Memoriam

My Nana, Doris Yost, my grandparents William and Ruth Raymond, and my adopted Grandmas, Dolores Friel, Pearle Saalborn, and Audrey B. Wild who encouraged me in all things.

CONTENTS

PREFACE

The pilot study course created and implemented for the purpose of this dissertation stemmed from my passion for creative, experiential learning practices and was cultivated from career and creative experiences over the past twenty-two years. The unique interaction and bond formed between players in live theatre is what initially drew me to the performative arts. Later, the discovery that live theatre has the power to broaden viewers' perspective of the world further deepened my affinity.

Throughout my formative years I performed in community and regional musical theatre and dance productions, and in 2002 I chose to pursue Theatre Arts at Catawba College for my bachelor's degree. Post-graduation I performed in tours of improv-based interactive children's theatre with Rags to Riches Theatre for Young Audiences and then settled in Pittsburgh, PA to start a theatre company with fellow Theatre Arts graduates from Catawba. Throughline Theatre Company was founded in 2010. The mission of the company is to deliver a four-play season: one new work from a local playwright, one modern play, one 20th century piece, and one classic work. The shows are linked by a common theme, or throughline. Each season explores how humanity experiences similar emotions, stresses, and joys, through time and how each theme is expressed and processed uniquely in each era.

I was content working in this arena, contemplating humanity through the art Throughline was creating and sharing with patrons of the productions, but I felt a desire to contribute to society in a more direct way. Following rehearsal of Throughline's first production, *Lysistrata*, a fellow castmate told me the University of Pittsburgh (Pitt) was hiring standardized patients (SPs), a position she said I would be "perfect for." In my first day of training, I learned that as an SP I would be portraying scripted patient cases for students to practice their clinical and

interpersonal communication skills and would provide the students with balanced and specific feedback from the patient's perspective to help them learn how their choices and actions impacted the encounter. I felt lit up. This was the link to society I had been looking for. I quickly advanced to become a member of the Pitt SP Training Team and in 2015, I accepted my current position at the University of South Florida as the Learning and Development Facilitator for the USF Experiential Learning and Simulation Department.

It was through this position and my work as an SP that I began to identify the concern explored in this dissertation. I noticed a trend in many student encounters in which the students asked a litany of questions to come up with a proper set of differentials but made assumptions about the patient's perspective of their illness and assumed the choices the patients would make about their care plan without inquiring. The inferences the students made were based on their own experiences and preferences, which did not necessarily align with the needs or desires of the patient for whom they were caring.

In 2015, I was asked to work one-on-one with a student who was remediating their third year of medical school because he was struggling to connect with his patients, and it was affecting his ability to elicit the information necessary to discern an appropriate diagnosis. To create the curriculum for our sessions together, I looked back to the lessons I had learned through acting and improv class. The skillsets I used to be attuned in the present moment, build connection with my scene partners, and react authentically to the gifts I was receiving, including my partner's body language, tone of voice, volume, proximity, and facial expressions, related directly to clinical care. Throughout the month that I worked with this student, we utilized improv exercises and scene work to help isolate and enhance these skill sets, with a positive

result. The student shared that he felt more confident starting conversations with patients and felt reassured once he learned how to attune to the cues he was receiving and adapt in the moment.

In 2016, I attended the International Medical Improv Train-the-Trainer Workshop at Northwestern University. This workshop affirmed my belief that performing arts training could benefit medical professionals and taught me new strategies and exercises to incorporate into my coaching and training. After completing this training, I began teaching medical improv workshops at USF to multiple learner groups including SPs, the Experiential Learning staff, remediating students, incoming third year medical students, incoming first-year medical students, PA students, and faculty of the College of Medicine. In 2020, I founded the Medical Improv Collaborative (MIC) with four colleagues, all of whom work in medical education at different institutions around the country. The mission of MIC is to provide medical educators incorporating Med Improv into their work opportunities to collaborate on projects and research and a space to share resources.

When I began my studies at Drew University, I came with the intention of exploring the effectiveness of Med Improv as a tool to enhance the doctor/patient connection for my dissertation topic. Throughout my coursework, I became more curious about how self-awareness plays an important role in mitigating bias, and I began to build upon my original concept, considering the key to deep understanding may be to first explore within to clarify the lens through which one sees and judges the world around them. Then they would be better adept at recognizing when they may be making assumptions based on their experiences rather than the one for whom they are caring. My studies at Drew also equipped me with multiple new learning tools to utilize in my experiential learning workshops. I discovered how the art of poetry, creative writing, and mindfulness provided similar learning opportunities to those that I found

previously in Med Improv. I hypothesized that if used collectively in one curriculum, learners would have the opportunity to explore introspectively and externally the ways through which they process and communicate. Further, the variety of teaching models would offer tactics to suit multiple learner types, those that prefer to process internally through contemplation or journaling and more kinesthetic learners who prefer to learn through role-playing and interaction.

My journey from actor to experiential health educator and medical improvisor, and finally a Doctor of Medical Humanities has gifted me the experiences, cognitive connections, and concerns that have led to the inquiries made in this dissertation. My hope is that the pilot study discussed will spark further exploration and research to enhance the use of humanities and experiential practices in health education.

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INTRODUCTION

Patient-centered care is an increasingly popular model in medical education and care practices. Medical educators and practitioners have become more aware of the importance of understanding a patient's perspective and inviting the patient to be a partner in creating the care plan (Reynolds, 2009). In "Four Phases of Care," Joan Tronto states that when caring about another, we must "strive to perceive their needs with as little distortion as possible" (Tronto, 1998, p 15). Although our lived experience helps us to relate to the feelings of the sufferer, cognitively we must focus on the other's perception, separating our personal realities to prevent inaccurate assumptions. In the clinical arena, it is a practitioner's responsibility to ensure that their patient's concerns are accurately communicated. It is imperative to the health outcomes of the patient that the practitioner understands the perspective of the patient holistically through the lens of the person suffering. When a practitioner makes assumptions about their patient, there is potential that the care plan will not align with the patient's social, cultural, or financial needs and personal preferences. Further, if a patient feels misunderstood and isolated by a disconnect in communication, they may feel less empowered to advocate for themself, which could lead to a care plan that is not feasible or amenable to the patient. Thus, narrative competency, the analysis of the patient's story through active listening, reflection, and affirmation could be seen as the first step in the care plan (Kopchinsky, 2021). When mastered, the patient ought to leave the clinic feeling understood and supported, empowered to take the first step in their journey toward hope and wellness.

The concern for narrative competency stems from experience as a Standardized Patient (SP) Educator in the experiential learning and simulation departments of multiple medical colleges. It is the responsibility of an SP Educator to review case studies and train SPs to portray

the patient of each case with authenticity. Following the encounters, SP feedback is received regarding the students' interpersonal communication skills. SPs are trained to reflect on each encounter through the lens of the patient they are portraying, articulating specifics of what the student did or said that had the greatest impact on them (Lewis, et al., 2017). Very often, critical feedback relates to a student's inability to completely comprehend the needs of the (standardized) patient. Examples of feedback received from SPs include, "I didn't feel like they really saw me," "they treated my symptoms but didn't really understand what I was going through," and "I don't think they listened to my preferences or ideas about my care. The care plan didn't incorporate my wishes." The frequency of these reflections prompted contemplation concerning the causes of this connection deficit, and how educators might be able to help bridge the patient-provider communication gap.

In many instances, students' missteps arise out of attempts to be empathetic, misguided by assumptions made about their patients' needs. Empathy has been widely conceived as an individual's ability to imagine the other's experiences and emotionally resonate with that experience. Empathy has also been classically viewed as a one-sided concept in which responsibility is placed solely on the caregiver to imagine being in the other's shoes (Van Dijike, 2018). However, this one-sided approach can lead to multiple negative repercussions. A patient-provider relationship is inherently asymmetrical. When trust has not been established, the patient is arguably more vulnerable in the power dynamic, affecting their confidence in expressing themself. If the provider utilizes empathy as a self-referential concept, putting themself in the patient's situation, their vision could be distorted by prejudice and bias (Van Dijke, et al, 2018). The patient is then faced with a misinterpretation of their needs or emotions. When the provider's understanding does not align with the patient's personal view of their circumstances,

the patient may perceive the provider's attempt to be empathetic as patronizing or intrusive (Van Dijke, et al., 2020).

Dispositional self-awareness, as described by Sutton (2016), can refer to insight, reflection, rumination, and mindfulness. More articulately, self-awareness may include trait mindfulness, "the existence of a dispositional tendency toward mindfulness" (Mesmer-Magnus, et al., 2017, p 79) and trait emotional intelligence (EI) which encompasses "the competence to identify, express, understand and regulate emotions in the self and in others" (Shi and Du, 2020, p 116). It is important for healthcare providers to have the self-awareness necessary to detect any implicit biases, "the unconscious prejudice in favor of or against one person or group or another" (Turner, et al., 2021, p 1727), which they may be unintentionally applying to their patients during clinical encounters. Without this awareness, a disconnect in communication can occur if a provider bases the patients' accounts on the provider's personal experiences and inferences.

A shift in focus from empathy to the concept of compassion in clinical education may also benefit health learners. While empathy is the practice of feeling as the other feels and anticipating what the other is experiencing, compassion acknowledges the suffering of the other and leads with an altruistic desire to help without taking on the burden of the sufferer (Ricard, et al., 2014). Not only does compassion mitigate the impulse to link one's own experiences to that of the other to find understanding, but compassion is also a safe practice for learners entering a field riddled with burnout. Neuroscience studies have shown that embodying compassion is linked to benevolent and positive emotions and positive neural pathways, while a focus on empathy activates negative thoughts, emotions, and neural pathways (Ricard, et al., 2014).

Tronto (1998) emphasizes the necessity and inevitability of continuously making moral judgments while engaging in care. To succeed, the caregiver must understand the patient's whole

story, their perceived needs, and an appreciation of their emotions. There must be a continuous conversation between the caregiver and the care receiver to ensure the care receiver's needs are met accurately and competently. Noddings (2013) also expresses that an understanding of the patient's whole story is necessary but suggests the way of achieving this is through mental engrossment, that is, "the stepping out of one's own personal frame of reference into the other's" (Noddings, 2013 p 24). In theory, Nodding's concept of engrossment seems an effective tool to ensure that the perceived needs of the patient are met. However, in practice, this concept might prove precarious for care providers as there is great potential to cross boundaries and the effect the patient's suffering has on the provider could impact their ability to provide the best care. Further, it is important to consider whether one can truly isolate their perspectives, priorities, and implicit biases to completely see through the lens of the other.

One's values, priorities, needs, and expectations are derived from a lifetime of experiences. They are complex and nuanced. Without an investigation to gain insight into another's lived experience, it would be challenging to have a true understanding of their perspective. Van Dijke (2020) addresses this consideration in the reimagining of empathy as a co-creative practice. Van Dijke's relational view of empathy calls for a "dynamic interaction" between the caregiver and care receiver in which they are both open to being affected by the other. This approach acknowledges that others have an ability to think, form opinions, and come to conclusions on their own, and provides opportunities within the exchange for the participants to adapt as they receive each other, and thereby gain new insight into the other's perspective (Van Dijke, et al., 2020).

Gadamer asserts that the patient's perspective and autonomy to make decisions about their care is vital but should be measured as equal to the critical and clinical knowledge of the

provider (Gadamer, 1989). Similar to Van Dijke, Gadamer proposes that the interaction between a patient and provider should not be one-sided. He suggests that there must be an open dialogue between the patient and provider to best articulate the order of needs and process of treatment. Gadamer still views it to be the provider's responsibility to guide the encounter, so it is not completely focused on the patient's agenda, and practical clinical aspects may be explored. However, this guidance should not be delivered as a one-sided truth. According to Widdershoven (2000), Gadamer envisions the guidance as a "Socratic dialogue," one in which the patient is encouraged to "actively take part in the process of making sense of the situation" (Widdershoven, 2000 p 27). When a patient refuses treatment, or the provider is met with a strong negative reaction, this is an invitation to engage in a dialogue in which both parties try to comprehend the other's perspective. The result of this exchange is a co-created perspective that reflects the ideas and goals of both the patient and provider (Widdershoven, 2000).

Medical Humanities is an interdisciplinary field that explores the humanities (e.g., literature, philosophy, history, ethics, theology), social sciences (e.g., anthropology, sociology, psychology, law), and the arts (e.g., theatre, film, poetry, creative writing, graphics, music, visual arts), and its application to health care education and practice (Northwestern University Feinberg School of Medicine, 2023; Batistatou, 2010). This dissertation has two main objectives. The first is to determine if a Medical Humanities curriculum containing mixed strategies of artistic and contemplative practices combined with group discussion and reflective journaling can increase pre-health scholars' self-awareness. The second is to explore, through participant narratives, the ways in which increased self-awareness can improve understanding of and enhance compassion for patients' perspectives and articulated desires.

For the purposes of this dissertation, an IRB approved study *Medical Improvisation, Narrative Medicine, and Contemplative Practices in a Health Education Training Environment: A Medical Humanities Approach to Increasing Self-Awareness and Strengthening Interpersonal Connection* (Study # 004892), was conducted. The study consisted of three, two-hour sessions. The Medical Humanities curriculum engaged learners in various experiential practices to promote self-exploration, and elicited applications of their findings to the clinical context. The course combined the specific humanities practices of assigned academic literature, mindfulness meditation, medical improvisation, poetry composition, and reflective journaling to provide a holistic approach to self-discovery and human connection. Improvisation and mindfulness exercises increase self-awareness of immediate reactions and provide space to reflect, acknowledge the experience, and then act with intention. They prepare participants to adapt in the moment by increasing their ability to be actively present and aware (Fu, 2019, Kabat-Zinn, 2005). Thus, it is my assertion that personal practice in exercises such as improvisation and mindfulness can enhance a practitioner's ability to both observe objectively (without judgment), and to proceed without expectation. Reading can provide similar benefits. Narrative evokes emotion. The implicit emotion in narrative can be a source of moral knowledge and ethical action (Morris, 2001). If care providers assume the role of active listener, they can deeply engage with these stories and allow them to inform the next steps in the care plan (Kopchinsky, 2020).

To enhance understanding, sessions centered around core principles defined as themes, and practice exercises utilized specific skill sets, defined as subtopics. Session One addressed the theme of attunement. The subtopic skills incorporated in Session One were non-judgment, utilizing silence, and present-moment awareness. Compassion was the theme of Session Two. The subtopic skills practiced in this session were building connection with “the other” and

affirmation. The theme of Session Three was adaptability. This session explored equanimity and empowerment as subtopics. The themes and articulated subtopics were selected to isolate individual and nuanced aspects of self-awareness and human interaction. The order in which they would be presented was decided with the intention of building upon each previous principle in practice. First, students practiced attuning to themselves and their environment. Next, learners were encouraged to embrace a compassionate mindset and challenged to look beyond their personal perceptions, enabling them to envision their environment with a new perspective. Finally, empowered with new tools and insights, they began to conceive ways of adapting their approach to enhance their communication and relationships with others in the clinical environment.

Chapter One details the process of conducting a research study for the purposes of this dissertation. Section One, *A Journey in Perseverance*, provides a description of the original vision and targeted audience, the reasons that vision was altered, and the ways in which embracing the concepts of the study (particularly adaptability), helped to reveal more than was originally anticipated. Section Two, *Approach*, describes the approach of the study and outlines objectives of the final pilot study. Section Three, *Final Study Curriculum*, concludes the chapter with an overview of this research study as it came to fruition with a participant population of pre-health scholars currently enrolled in Bachelor of Science programs at the University of South Florida.

Chapter Two reviews the literature that addresses attunement, compassion, and adaptability as tools for communication and attaining a more comprehensive understanding of the other. Experiential and contemplative practices that have been proven to enhance these skills in practitioners are also discussed. Practices explored include theatrical improvisation exercises

applied in a medical context, “Med Improv” (Watson, 2011), meditation, and narrative medicine.

Chapter Three examines the results of the qualitative research study conducted for the purpose of this dissertation. Data included weekly journal entries, a final reflection essay, and a post-study interview completed by each participant. Submitted narratives were analyzed to explore the participants’ own perceived growth. Connections to the literature and experiential sessions were explored as well as acknowledgements of shifts in participants’ self-awareness and relationships. Responses were categorized into the course themes (attunement, compassion, and adaptability) and the course practices (improvisation, meditation, reflective writing, and literature).

Chapter Four concludes the dissertation with a discussion of insights for future research. Unanticipated outcomes of the incorporated pilot research study are explored, and limitations of the research are discussed. Finally, results of the conducted pilot study are considered alongside results of previous studies to provide further evidence regarding the value of incorporating courses in Medical Humanities to enhance the education of healthcare learners

CHAPTER ONE

Experiential Study with Pre-Health Scholars

A Journey in Perseverance

The process of my research study began with a definitive plan and no prospect of hurdles in my path. Shortly before enrolling in the Medical Humanities Doctoral Program at Drew University, I had been conducting medical improvisation workshops with obstetrics and gynecology (Ob/Gyn) residents at Tampa General Hospital, Tampa FL, as part of their wellness curriculum. The faculty leading the wellness program voiced an interest in collaborating with me on a research project with resident participants. His invitation seemed the perfect opportunity to conduct this dissertation research which would explore the effectiveness of a Medical Humanities curriculum with medical residents.

The original vision was to conduct the study on a bi-weekly basis consisting of six, two-hour sessions, over a three-week period. The participant population was intended to be residents across multiple specialties at Tampa General Hospital, including Ob/Gyn, pediatrics, internal medicine, and surgery. The six sessions were structured as follows: Session 1. Non-Judgment and Present Moment Awareness; Session 2. Looking Deeper with Compassion; Session 3. Equanimity and Affirmation; Session 4. Empowerment and Connection; Session 5. The Power of Silence; and Session 6. Wrap-up: Putting the Pieces Together. Medical residents are in the stage of their training in which they are seeing and treating patients. The study would entail asking participants to think about how the principles discussed in class could apply to their clinical practice and submit journal entries detailing how they attempted to incorporate the learned skills into their clinical encounters and the outcomes. The Ob/Gyn faculty with whom I was partnering approved my proposal, and the IRB was approved in November 2022. The Ob/Gyn faculty sent

out the interest letter to the Ob/Gyn students as well as the faculty of the other specialties. In January 2023, there was news that my Ob/Gyn faculty research partner was abruptly leaving Tampa General Hospital and the University of South Florida. Learners had yet to be secured for the study. Without having the expected faculty support nor reserved time for resident participation, recruitment proved very challenging. Resident time is very tightly scheduled, and residents are hesitant to try to fit anything extra into their already stressed schedules. To accommodate the time constraint, the curriculum was condensed to three sessions, each focusing on one main theme. The themes were attunement, compassion, and adaptability. Although the number of exercises was condensed in the revised course, the original objectives were still addressed. It was still not feasible to secure residents for the three-session course, and it became apparent that the study needed to be adapted for a different level of learner.

The second approach was to conduct the research study with third-year medical students at the University of South Florida (USF). All incoming third-year medical students participate in a two-hour Introduction to Clerkship Medical Improv workshop. Some students who participated in the 2023 workshop expressed interest in doing more experiential practices. In their third year of medical school, students at USF are separated into cohorts and rotate through clerkships of each specialty (i.e., family medicine, women's health, surgery, internal medicine, psychiatry, neurology, and pediatrics). As was true for the medical residents, it was not possible to find times for the study sessions that accommodated all the interested students' varied schedules.

Smith, Director of Student Diversity and Enrichment at USF, and another listed investigator for the research study, suggested adapting the study content to suit undergraduate students earning their Bachelor of Science in pre-health studies. Smith regularly coordinates programming for this learner population and offered to head the recruitment. At first, it seemed

the original hypothesis would be difficult to investigate if such a drastic alteration in the level of the learner was made. It was thought to be instrumental that participants were already seeing patients, as the research question involved exploring the ways in which a Medical Humanities curriculum could enhance patient interaction and understanding. Consideration was given as to how far the shift in learner population would alter the study from the initial inquiry and if there would still be value in the findings.

After contemplation, it was realized the hesitation stemmed from a resistance to changing the original vision. The idea for this projected study with practicing physicians had been envisioned years ago and it was challenging to perceive the project conducted in a new way. Furthermore, much effort had already been invested in the original study plan. One of the core principles of improv is to accept all opportunities presented as gifts to build upon, coined in the phrase, "yes, and." It was decided that this tenet should be adhered to, and Smith was contacted to begin the recruitment process.

Once it was accepted that the project would be different than originally imagined, many benefits were discovered. For one, the logistics were greatly simplified. The dates and times were selected based on a mutually convenient schedule, and Smith sent the proposal to over 200 undergraduates enrolled in the pre-health scholar programs. Rather than trying to work with busy residents to find windows of time in which to fit the practices, multiple submissions of interest were reviewed to choose the eight participants who were the best fit.

Moreover, the delays in the project forced postponement of the study to Summer 2023. This timing turned out to be serendipitous as it was in between semesters, and the students had more time to commit to the study. Many participants voiced that they took more time to process the content of the study than would have been possible during the Fall or Spring semester. The

cohort also proved to be exceptionally open-minded and insightful. The students were excited to learn new skills and speculate on ways the skills could be utilized in their work with patients and in their personal lives. They were supportive and willing to learn from each other. It appeared as if addressing the principles of effective communication and emotional intelligence before they started their clinical education offered them a fresh perspective, uninhibited by the insecurities often brought on by medical school. In the end, this journey is regarded with gratitude; embracing the changes as they came opened doors to valuable experience and positive outcomes.

Approach

Once it was determined that the study would target pre-health scholars, everything progressed without disruption. The IRB was updated, and the study title changed to *Medical Improvisation, Narrative Medicine, and Contemplative Practices in a Health Education Training Environment: A Medical Humanities Approach to Increasing Practitioner Self- Awareness and Strengthening Interpersonal Connection* (Study # 004892). The primary objective of the study was to determine whether a Medical Humanities curriculum composed of mixed strategies of artistic and contemplative practices, combined with group discussion and reflective journaling, could increase pre-health scholars' self-awareness. The secondary objective was to determine whether increased self-awareness could improve pre-health scholars' abilities to understand and demonstrate compassion for the perspectives and articulated desires of others. The one change in objective from the original version targeting residents was to broaden the scope of interpersonal connection. The original vision focused solely on patient/provider connection but given the lack of clinical experience of the pre-health scholars, it was considered that the content would be more applicable to the learners' daily lives. Subsequent chapters will show the ways in which the

learners applied the skills in their work and daily lives, as well as the ways they speculated the course principles would be of value in the future.

The research project was originally designed as a mixed method study. Qualitative data consisted of interviews and written reflections. Participants were requested to complete two validated surveys, the Revised Jefferson Scale of Patient Empathy (Hojat, et al., 2002) and Self-Awareness Outcomes Questionnaire (Sutton, 2016) pre and post study to measure outcomes of the learner's progress. Due to the small sample size of ten participants, the surveys would not be considered valid and thus did not justify the cost of utilizing them for the pilot study. The decision was made to omit the surveys and focus solely on the qualitative data.

Participants were recruited through a mass email sent to all students enrolled in pre-health Bachelor of Science programs at University of South Florida. The email, which can be viewed in the appendix of this dissertation, detailed requirements for participation, objectives of the study, practices that would be utilized, and the total time commitment required. Embedded in the email was a link that directed students to an interest survey, which provided information that would determine the candidates' qualification for the study. The survey asked for the student's name, program, year of study, and number of completed shadowing hours. Requirements to participate were at least ten hours of shadowing in a clinical environment (Aspiring Docs, n.d.) and enrollment in a pre-health BA program for at least two semesters. Eight participants were selected from the survey respondents who had each completed at least thirty hours of shadowing experience.

The initial informational letter included in the interest email, which was sent to the student listserv, stated that the study consisted of three, two-hour sessions which include group interaction, reflection, and other introspective activities. Through experiential and contemplative

practices such as improvisation games, meditation, and reflective writing, they would be exploring the connection between self-awareness and patient interaction. There was no cost to participate in the study and it was completely voluntary. Participants would not receive academic credit or compensation. Upon completion of the study, they would receive a Certificate of Completion from the University of South Florida, Morsani College of Medicine, Department of Experiential Learning and Simulation.

Participants would be assigned to complete at least one journal entry of unspecified length per session, and one or two academic readings between sessions. Time commitment would include approximately two hours per session. Students would also be asked to sit for a one-hour interview following the last session and would submit a 1300-word final reflection paper (500 words to summarize experience with literature and practice, 500 words to explain how they applied teachings to their work and personal lives, and 300 words to express their final thoughts and takeaways). Total time commitment for participants would be approximately twenty-five hours over three weeks. Participants were informed that the research would be the basis of my dissertation for my Doctor of Medical Humanities. Qualitative data would be collected from interviews and personal reflections. All quotes and responses used would be de-identified for the participants' protection and confidentiality.

Risks included potential discomfort or vulnerability discussing implicit bias, boredom or frustration during meditative practices, and embarrassment performing improvisation exercises. Participants were free to end their participation at any time but were informed that they would not receive the certificate unless all components of the study were completed.

All sessions took place in person at the University of South Florida and were facilitated by me with assistance from the research assistant, Christie Eugene. Eugene and I were also

available to all participants, via email, between sessions if participants desired to discuss questions or concerns.

A perceived benefit for participating in this study was the opportunity to engage in a diverse range of activities that would guide participants in self-exploration and discovery. The course was designed to accommodate multiple styles of learning, incorporating both performative and introspective practices. Participants had the potential to make important connections that could improve their clinical skills and enhance their personal lives. The process of discussing experiences and outcomes with peers, and the practice of journaling, could be healing and enlightening. These practices have been proven to provide significant mental health benefits as well as practical communication tools (Kabat-Zinn, 2005; Mehta, et.al, 2021; Rudnytsky & Charon, 2008). The skills and approaches to enhance patient-centered care that participants may gain during this study can positively impact participants' future patients. Participants may also bring new ideas and insights from the study to their peers, which could increase confidence and comradery amongst their classmates. Skills learned in the study also have the potential to benefit personal relationships within the participants' lives (Mehta, et.al, 2024).

Final Study Curriculum

The three-session experiential course engaged learners in various contemplative and artistic practices in a safe space of self-exploration and elicited applications of their findings to the clinical context. This course incorporated practices and literature acquired from multiple resources across my professional and academic journey. The curriculum combined assigned academic literature, mindfulness meditation, medical improvisation, poetry, and reflective journaling to provide a holistic approach to self-discovery and human connection. Learners

participated in debrief discussions focused on the literature and practices and were encouraged to share their personal discoveries. At the end of this course, learners submitted a reflective essay citing their personal journey throughout the course, and they articulated the ways in which they plan to apply these findings to their relationships and clinical practice moving forward.

Each session centered on a specific theme. Session One, *Attunement,* included the subtopics of Non-Judgment, Silence, and Present-Moment Awareness. Session Two, *Compassion,* addressed the subtopics Building Connection and Affirmation, and Session Three, *Adaptability*, covered the subtopics Equanimity and Empowerment. The specific topics and order of presentation were selected to isolate individual and nuanced aspects of self-awareness and human interaction. Each topic built upon the previous.

This course required a large, open room with no tables set up in which learners could comfortably and safely move uninhibited. Access to a whiteboard, a computer with sound, and a projection screen was also necessary. A large group learning classroom on the University of South Florida main campus was secured to conduct the sessions. This location is close to student dormitories and undergraduate classrooms, thus was chosen for the convenience of the learners. All tables and chairs were cleared prior to the start of each session. The sessions included sitting meditations and active exercises so learners were encouraged to bring a yoga mat to sit on, and to wear clothing in which they could comfortably move. Seven yoga mats were supplied to ensure all participants had the tools they needed at no cost to them. If a member of the cohort could not comfortably sit on the floor, accommodation would have been made for all participants to sit in chairs for the meditations and discussions. Similar accommodation would also have been made as necessary for all components of the course.

Session One: Attunement took place on July 7, 2023, from 10:00am -12:00pm ET. The session started with a review of the consent form. All questions that arose were addressed. The objectives and goals for the study were then outlined. The research assistant ensured everyone signed the consent form.

This session focused on building a safe space for the learners in which they felt invited to openly explore the vulnerable arena of implicit bias, build self-awareness without judgment, and share their discoveries. A "safe space" can be described as a confidential environment in which all parties assume good intent from their peers and facilitators, participants are encouraged to express themselves, and all ideas, questions, contributions, and concerns are consistently respected and affirmed.

As in mindfulness training, theatrical improvisation frames mistakes and missteps as opportunities for growth as opposed to failures or deal breakers (Kabat-Zinn, 2005; Longtin, 2020). Improvisation requires that participants do not anticipate their next step, but rather react genuinely in the moment. When people act spontaneously, subconscious ideas may come out which provide learners the opportunity to acknowledge and process the self-discoveries and unconscious motivations behind their behavior. It is imperative to the safety of the individuals and the class as a unit that all participants bring an awareness that no one is perfect, acknowledge that everyone present is committed to growth, and assume good intent. To ensure this expectation, participants were asked to repeat the phrases, "Assume good intent" and "I don't have to be perfect" as verbal contracts that could be recalled as necessary throughout the sessions. These phrases delivered in this format were learned while co-facilitating with Belinda Fu at the American Association of Family Physicians (AAFP) Wellness Conference.

The first exercise was a common name game used to acquaint the learners with one another and create an environment in which they felt invited to be silly together. Standing in a circle, the learners took turns saying their names paired with an alliterative word and accompanying motion. For example, one may say “Bouncing Briana” as they jump up and down. Everyone would then repeat “Bouncing Briana” while jumping up and down. The play would rotate around the circle with each participant sharing their name and motion followed by the group’s repetition. Once everyone introduced themselves, the group practiced passing the names randomly within the circle. In this round, one started by stating their name with their gesture and then chose another person in the circle by stating their name, such as “Bouncing Briana,” “Shopping Sherri.” Then Shopping Sherri repeated her name and continued the rotation by naming another participant. The play continued until everyone had been called upon to participate and the learners had all become familiar with each other.

The entire group, including the facilitator, then sat on yoga mats in a large circle to discuss the prepared readings. When a learner shared in the discussion, they were instructed to choose a stretch that felt comfortable, such as reaching forward to touch their toes. The rest of the class members were asked to give the learner their full attention and mirror the stretch until the thought was fully articulated. As each learner shared their experience with the readings, they took their turn leading the stretch circle. The goal of incorporating mirrored physical exercises into group discussions is to physically demonstrate full focus, emphasizing to participants’ that they are heard and seen. This technique is used in the International Medical Improv Train-the Trainer Course instructed by Katie Watson, JD at Northwestern University.

Prior to the first session, the participants were assigned three readings, two mandatory and one optional, in preparation for the discussion. The first reading was “Common Ground:

Frameworks for Teaching Improvisational Ability in Medical Education" (Fu, 2019). In this article, Fu introduces her "3A's" model." The model condenses the core tenets of improvisation into three main principles, articulated as Attune, Affirm, and Advance, and is proposed as a framework for utilizing improvisational skills in medical education. This article was selected as the first reading because it provides a thorough explanation of how theatrical improvisation techniques can enhance clinical communication. This article provided an applicable introduction to the study as Fu's "3 A's" model (Attune, Affirm, and Advance) greatly influenced the selection of themes chosen as the focus of the study curriculum (Attunement, Compassion, and Adaptability).

The second reading was an essay written by Joan Tronto entitled "An Ethic of Care" (Tronto, 1998). In this essay, Tronto emphasizes the necessity to perceive the articulated and unspoken needs, and personal priorities of a patient with as little distortion as possible. She outlines the process of care in four phases: Caring About, Caring For, Caregiving, and Care Receiving.

The third, and optional, reading was an article entitled "Epistemologies of Silence" (Denomme-Welch and Rowsell, 2017). The authors explore questions concerning silence and its impact upon their respective teaching, research, and professional practices. The authors consider "different expressions and meanings of silence and how this can offer new understanding of culture and identity, including social and political issues, through arts, performance and arts-based research" (Denomme-Welch and Rowsell, 2017 p10). The authors discuss the dichotomy of silence. In one regard, if stemming from feelings of fear, apprehension, or unrecognition, silence can be the source of misunderstandings and misassumptions. However, silence is also an opportunity through which one might self-reflect and discover personal judgments or biases.

This reading was assigned as optional because it is a lengthy and challenging text, written with an academic tone that could be difficult for some undergraduate participants to absorb. An overview of the article was provided, and questions were discussed during class.

The beginning of the first session focused on non-judgment, beginning with a fifteen-minute guided meditation facilitated by Jon Kabat Zinn (2020). The recording was accessed on YouTube and played through the AV system in the classroom. The students were instructed to sit or lie down on their mats, depending on their preference. This guided meditation offers an empowering introduction to mindfulness meditation. Kabat-Zinn presents mind-wandering and distractions as natural and routinely provides supportive reminders to note distractions, and then guides participants towards allowing their thoughts to dissipate without judgment. This practice was selected to position learners in a proactive, forgiving mindset, thus preparing them to approach the vulnerable topics to come.

Following the meditation, participants reassembled into two circles for an improv game called *Zip-Zap-Zop*. Each circle played their own game in tandem with the other. The goal for this exercise was to create an environment in which learners sensed that they had permission to challenge themselves while feeling free to fail. *Zip-Zap-Zop* incorporates the "failure bow" (Smith, 2012) which is an affirmation tool many improvisers utilize when they make a mistake in a scene or improvisational game. If players feel they have broken a rule or agreement in the exercise, they will pause, and then declare loud and emphatically, "I Made a Mistake!" or simply, "Ta-Da!" The whole crew will then cheer for the player, congratulating them on their accountability and their recognition of the opportunity for growth. Learners verbally passed the words "zip," then "zap," then "zop," in a repeating pattern. The words are verbally passed randomly around their circle so no one could be sure when they would receive a word. Learners

were guided to make direct eye contact and point toward the receiver to ensure they were articulating clearly to whom they were passing. When the pattern was broken, the participant who made the mistake shouted “ta-da” and did a “failure bow” and everyone in their circle would cheer. The participant who made the error would then restart the pattern. After two minutes, play was paused, and the learners were instructed to also keep a fast and consistent pace to their pattern. If there was a pause or fumble, they must take a failure bow. In the final round, learners had to run and join the other circle every time they made a mistake. This exercise is a fast-paced pattern game with a high probability that mistakes will occur. Because students are unable to anticipate, to be successful they must stay present in the moment, fully focused on their peers. Affirmation is reinforced with the collective celebration following each mistake.

Participants are increasingly put at ease by the chorus of “ta-das” and the constantly changing circles; they are reassured that everyone is fallible. The Failure Bow tool can provide affirmation, liberation, and healing, as it allows the improvisor to gain the confidence that they are forgiven and release any negative emotions (Mehta, et al., 2021). The release allows participants to move forward without the distraction of rumination. Learners were encouraged to continue practicing failure bows throughout the three sessions, whenever they felt appropriate, except during meditation practices. As the facilitator, I demonstrated my own accountability with failure bows.

A debrief and reflection check-in followed this exercise to explore how the learners were feeling, what they discovered during the meditation and pattern exercise, and how those discoveries applied to the subtopic of non-judgment.

The next exercise, *Empathy Walks* (Watson/Northwestern, 2016), was conducted in silence. The objective was to explore what assumptions one makes about others before knowing

their whole story. This exercise brings to the forefront the ways that past experiences and inferences can shape how we implicitly categorize the world around us, such as applying gender and race to specific careers, levels of education, or economic status. An example of making an uninformed assumption would be one hearing the term lawyer and envisioning a white male. During this introspective exercise, participants walked around the room without engaging one another. As they walked around the space, the facilitator read aloud prompts that detailed three scenarios of unique individuals and their specific circumstances. Participants were asked to physically embody who they envision these individuals to be as they interpreted each prompt and navigated the space. They were encouraged to contemplate how they held themselves, how they walked, and at what pace. Participants engaged in three separate scenarios; a fifty-year-old lawyer, a twenty-year-old surfer, and a person of the participant's actual age who is experiencing back pain. The character's personal circumstances changed throughout each scenario to bring depth to each story and challenge participants' initial assumptions about the people they were embodying (Watson/Northwestern, 2016). A thoughtful debrief discussion followed this exercise.

The last exercise of Session One focused on present-moment awareness. Heightened awareness was practiced with an improv exercise called, *"Hi, how are you? Concrete Observations"* or sometimes is referred to as *"My Little Play."* Two volunteers received whispered prompts of their current state of being. Person A was told, "You just received exciting news you can't wait to share." Person B was told, "You are on your way to take care of something about which you are really anxious." The pair then presented the following scripted conversation to the rest of the class:

Person A: "Hi."

Person B: “Hello.”

Person A. “How are you?”

Person B: “I’m fine, thanks.”

The observers were asked to articulate all the concrete observable behaviors they noted during the five-second exchange, such as “Person A was looking directly at person B.” If an observer assumed the actor’s intentions or assigned motives to the actor’s behavior with a comment such as, “Person A really likes Person B,” they were redirected by the facilitator to elicit concrete observable behaviors. For example, “What was Person A doing that made you think they really like Person B?”

During the debrief, we discussed the notion that communication encompasses much more than language. We can elicit meaning and intention through our tone of voice, facial expressions, volume, physical proximity, pace, and body language. There is a story in the “silent space,” if we are willing to listen to more than the words (Kokanović, R., & Stone, M, 2018). Broken narratives, delivered in a silent look or terror, a single tear, a nervous laugh, or an abrupt change in topic, all add to the context of the narrative; these are signs which help to articulate what the patient needs in that moment, and how to navigate toward a successful exchange.

In preparation for Session Two, the participants were sent journal prompt options, a contemplative reading assignment, and two readings. The journal prompts included: 1) Reflect and write about one of the questions posed by Tronto at the end of the article, “An Ethic of Care” (1998). What had the greatest impact on you in the first session? How do you see the concepts reflected in your life/work? Learners were invited to either write about one or both prompts, or they could elect to journal regarding a different aspect of their experience. The journal process

was intentionally flexible so the participants would feel invited to express what was impacting them most. Prompts were offered to accommodate learners who prefer more direction.

The contemplative reading assignment included two short Buddhist passages entitled *The Other Side* (n.d.) and *A Cup of Tea,* (Reps & Senzaki, 1998). Learners were instructed to read the passages slowly and carefully, one at a time, take some time to reflect on what they had read, and then read them again. They were asked to record their thoughts in their journals.

The assigned readings for Session Two included a *Scientific American* article entitled, "Mind of the meditator: Contemplative practices that extend back thousands of years show a multitude of benefits for both body and mind" (Ricard, M., Lutz, A., & Davidson, R. 2014) and "The Fortunate Physician: Learning from our Patients" (Griffin, 2004). Written by Ricard, a molecular biologist and Buddhist monk, and neuroscientists, Lutz, and Davidson, "Mind of the meditator" provides a foundational description of what meditation is and discusses the physiological changes that occur in the brain via meditation. Ricard, et al. (2014), demonstrate how meditation can enhance well-being, as well as improve the ability to cultivate compassion for others. Further, this article addresses loving kindness meditation, which is an exercise that would be practiced in the next session. "The Fortunate Physician" (Griffin, 2004) outlines a narrative medicine project the author Fred Griffin conducted with practicing physicians. Using a book by John Berger, *A Fortunate Man: The Story of a Country Doctor* (1967), which details Berger's observations of physician John Sassall in the 1960s, he introduces concepts such as unconscious motivation, transference, intersubjectivity, and empathy as clinical tools to bring into the doctor-patient relationship.

Session Two: Compassion, took place on July 13, 2023, from 10:00am-12:00pm ET.

In Session One, learners focused on heightening awareness. The exercises encouraged learners to acknowledge the cues those with whom they engaged were gifting them in the present moment. These may include but are not limited to, their proximity, how they position themselves, their tone of voice, volume, facial expressions, body language, and overall energy in the room (Shiller, 2020). Session Two encouraged participants to use the gift of attunement to build connection with those with whom they communicate and affirm what they learn about the other.

Session Two began with a stretch circle in which the readings and contemplative assignment were discussed. The first subtopic of Session Two was building connection. To address this topic, participants engaged in a fifteen-minute Loving Kindness Meditation guided by Steven Hickman, PsyD (2017), accessed via YouTube. This meditation reinforces the outlined expectations of the course, to proceed without judgment and to assume good intent. It begins with a reminder of the importance of cultivating an attitude of compassion, kindness, passion, curiosity, and openness toward oneself. Hickman guides listeners to bring people into their awareness and send the following wishes to them, “May you live in safety and health. May you have understanding. May you be happy. May you have ease of being.” The practice starts with envisioning individuals who are close to the listener, then turns attention to someone the listener feels generally positive about, then to someone with whom they have neutral feelings, and then to someone with whom they have trouble getting along. Next, Hickman guides listeners to turn attention to everyone in their vicinity (friends, family, neighbors, etc.), then to all people around the world, and finally to make the wishes for themselves.

The second subtopic of Session Two, affirmation, began with an exercise called *Paired Conversations* or sometimes referred to as, *“Yes, and.”* Participants split into pairs. The group collectively chose a topic and, using statements only, engaged in back-and-forth conversations

about the topic. Questions were not permitted so as to put the responsibility back on their partner to further the conversation. After the initial statement, every statement had to start with the words, “Yes, but.” The process was then repeated two more times with new topics of discussion and using the phrases, “Yes, and,” and finally, “I appreciate you saying that because.” The goal of this exercise is to experience how the development of conversations are impacted by the impetus behind the words we use. The word “yes” does not necessarily mean “I agree,” it can also mean, “I am listening.” Even though one may not agree with the improvised initial statement, affirming the other’s perspective with “yes” or “I appreciate you said that” before offering one’s opinion, allows the conversation to move forward and offers potential for collaboration. As in equanimity, one can note that they do not like something without allowing it to affect them or how they choose to move forward. In debrief, the class was asked to contemplate and share the ways a “yes, and” perspective can be beneficial in clinical and everyday settings.

Next, the class played *“Hello ___.”* Participants were split into groups of three, ensuring that partners differed from those of the previous exercise. As there were ten participants in the study, the facilitator and research assistant participated to complete four groups of three. Person A was the “emoter,” Person B was the “guesser,” and Person C was the “conductor.” Person A chose a concrete emotion such as excited or frustrated and whispered their emotion to Person C. Person A then greeted Person B with the words, “Hello, (name),” while expressing the emotion they had chosen. Person B then guessed the emotion they were perceiving with the response “Hi (name), you look___.” If Person B did not name the exact emotion Person A intended, Person A tried again, recalibrating their emotion, as necessary. Person C held Person A accountable to keeping their specific selection rather than conceding when Person B named a similar but not

exact emotion. Person C could also help Person A decide if they needed to escalate or minimize their display of emotion. Person A was allowed three tries before revealing their emotion to Person B. Play rotated until every participant experienced all three roles. The research assistant and facilitator started as Person B (the guesser), to break down hierarchy and enhance comfort in the group. It would not be best practice for facilitators to conduct first as it is important to establish peer status for the exercise. It may also be intimidating for the learners to practice emoting after the facilitators, especially if the facilitator received a successful guess on the first try. Guessing a perceived emotion, as Person B, is equally as vulnerable a position for student and teacher as all parties are equally as likely to guess wrong.

The goal of this exercise was to demonstrate that individuals externalize and perceive emotion differently. While some people are very expressive, some are more reserved. Assuming one's perspective or emotional state without seeking clarification can lead to misinterpretations and misunderstandings that may cause a barrier in a relationship or hinder the ability to provide better care. Further, some participants may become more aware of how they are perceived by others. Perhaps they come off stronger than they realize or are more elusive than they mean to be.

Returning to the subtopic of building connection, participants paired up for the final exercise of Session Two, *Movie Star Interview*, also introduced to me by Belinda Fu. Participants took turns interviewing each other as if they will play the other in an upcoming movie. They were told to think through the lens of the other and use the first person to ask their questions. For example, the interviewer may ask, "Where was I born?" In turn, the interviewee would respond, "You were born…" and provide the place they, the interviewee, was born. The point of this exercise is to truly come to an understanding of one's partner, to be able to portray

them with authenticity, rather than to simply obtain basic facts about them. The direction to use first person pronouns, including a prompt to gain a comprehensive understanding of one's partner to aid in representing them authentically, provides the potential to foster a connection quickly because participants are encouraged to ask more probing questions. Partners reserve the right to decline to answer a question if it feels too personal, but that did not occur in this workshop. The session ran late, and there was not enough time to switch partners. Participants were adamant about wanting to complete this activity during the final session, so they could reciprocate the gift of focused attention to their partners and learn more about them in return.

The homework for the final session included a poetry assignment, a journal entry, and two readings. Participants were asked to write a letter to a patient they shadowed, a friend, or family member. They were instructed to use the time to express themselves fully in the letter, in a way they may not have been able to in person. Participants were then prompted to re-read the letter and isolate the most important points they would like to emphasize; they were to highlight the parts that got to the essence of what they wanted to convey. Finally, they were asked to write the letter as a poem. The journal prompts for this session were: 1) Reflect on any of the exercises from Session Two. What did you discover? What was challenging? Surprising? What felt natural/unnatural? 2) Have these sessions helped/hindered the way you have navigated situations in your work and life? Reflect on specific experiences from the week. 3) How do you perceive compassion vs. empathy? How may each be an asset and/or a burden in your life and clinical practice? 4) You may choose not to submit your poem. Reflect on the experience of writing your letter and turning it into a poem. It was not required that participants submit their letters or poems to eliminate the risk of causing students to feel limited by the vulnerability of

thinking that others would view their work. Some chose to share their letters and their poems along with their reflections of the process.

The readings for the final session were “Relating Equanimity to Mindfulness” (Anālayo, 2021) and “The Doctor-Patient Relationship as a Gadamerian Dialogue: A Response to Arnason” (Widdershoven, 2000). “Relating Equanimity to Mindfulness” surveys key passages on equanimity and attempts to differentiate types of equanimity in the Buddhist tradition. Equanimity refers to a mental calmness, in which one accepts both good and bad experiences with an even temper. Anālayo proposes three types of equanimity including as a hedonic neutrality (a feeling tone), interpersonal impartiality (a divine abode or immeasurable state), and as equipoise (a state of mental balance). “The Doctor-Patient Relationship as a Gadamerian Dialogue: A Response to Arnason” (Widdershoven, 2000) proposes viewing a clinical encounter as a Socratic dialogue, one in which the patient is encouraged to actively take part in the process of making sense of the situation. When a patient refuses treatment, or when the provider is met with a strong negative reaction, this is an invitation to engage in a question-and-answer interlude, in which both parties try to understand the other’s perspective.

Session Three: Adaptability, took place on July 20, 2023, from 10:00am-12:00pm ET. The first session focused on skills needed to attune to another. In Session Two, students practiced tools to help participants receive others with compassion and without judgment. In this final session, participants explored various ways of responding to the other. Learners practiced embracing equanimity, the ability to recognize feelings without letting them impact choices or actions (Anālayo, 2021), and learners examined ways that word choice can either empower or demean.

On yoga mats for the stretch circle, class began with a discussion of the readings and contemplative poetry assignment. The first subtopic, equanimity, was addressed with a fifteen-minute guided meditation accessed through YouTube entitled, *Lesson 8: Equanimity and Letting Go* (2022), guided by Kaira Jewel Lingo. This meditation guided participants to receive moments and accept them as they are. Lingo asked practitioners to visualize a problem they are currently experiencing and to slowly move it away, to acknowledge how it feels, and accept what it is. The practitioners were asked to choose where to put the problem. They could accept the problem's presence and let it stay right next to them or choose to release the problem and walk away.

Next, learners were asked to find a partner with whom they had yet to work, for an improv exercise named *Time Traveler*. This exercise is also known as *1776* or *Rip Van Winkle*. One partner was asked to pretend to be from the year 1776, and the other was tasked with describing a microwave to them. Prior to beginning the exercise, the group discussed the basic context of life in Colonial 1776, including the resources that were available in daily living. Participants were not prompted regarding how to explain the microwave or what exactly needed to be included in the description. Some chose to focus on the basics of why and how people use a microwave. Others dove deeply into the science behind electricity and radiation.

The objective of this exercise is to shed light on the reality that most patients' health literacy levels are not equivalent to that of their medical provider. Further, a patient may have needs or desires based on their specific culture, religious beliefs, or past experiences that differ from that of the clinician's agenda. Asking questions to gain a better understanding of a patient's perception, understanding, and what they specifically want to know, are great tools for use in finding a path that accommodates both parties.

Since participants expressed a desire to reciprocate the attention and recognition felt from the first round of the Session Two exercise, *Movie Star Interview*, time was scheduled following *Time Traveler,* to allow the partners to switch and reconnect.

Next, five participants were asked to link arms to collectively become the *Word at a Time Expert*. The remaining five learners were the observers who asked the Expert an open-ended question. The five-headed expert answered the question, each "head" speaking one word at a time. When they felt that the question had been fully answered, they simultaneously bowed. This exercise was repeated so all participants had the opportunity to engage.

To be successful in *Word at a Time Expert*, learners had to listen carefully to the chain of words coming before them to craft a statement that made sense. They were not able to anticipate what they would say as each word was contingent on the previous one. No one person could guide the response; it was a spontaneously crafted co-creation. This exercise gives participants the opportunity to experience true collaboration. Learners may have noted dissatisfaction with the word that preceded theirs but were encouraged to not let that distract or upset them.

The final subtopic covered in the adaptability session was empowerment. Engagement with this topic began with the exercise *One up, One down* (Johnstone,1979). In this exercise, the students partnered with a peer with whom they had not previously interacted. Partner A was prompted to tell Partner B something of which they were proud. Example: "I recently read the entire *Lord of the Rings Trilogy*." Partner B was then guided to reply with a statement that raised their status above that of their partner. Example: "I don't read fiction. I prefer more academic literature like the works of Neil De Grasse Tyson, Malcolm Gladwell, and Steven Pinker." Partner A then repeated their pride statement. "I recently read the entire *Lord of the Rings Trilogy*." This time, Partner B was asked to respond with a statement that lowered their own

status. Example: “Wow, I get so distracted. I have so many unfinished books on my shelf.” The third time, Partner B was asked to respond with a statement that lowered the status of Partner A. Example: “Imagine all the time you wasted on fairy tales rather than networking and keeping up with current events.” Partner A repeated the pride statement a fourth and final time. For the final round, Partner B was asked to raise Partner A’s status with their response. Example: “Wow, what an amazing accomplishment. I bet the books are way better than the movies.”

The objective of this exercise is to increase awareness regarding the choices one has while responding within any exchange. Individuals tend to have default modes of communication of which they may not be aware. Some modes feel more familiar than others. Building awareness of one’s default mode promotes more mindful intention to what they are trying to communicate and encourages an approach that empowers themself and those with whom they commune (Penberthy & Penberthy, 2021).

This exercise can be challenging for learners; some fear lowering the status of their partner. To ensure all learners felt safe engaging in this activity, both as a giver and responder, they were reminded of the verbal commitment they made in Session One: to assume good intent. The exercise was prefaced with a disclaimer that each statement was going to be crafted in a specific way, as a simulation demonstrating the ways these statements could impact others in a real-life situation. Nothing should be taken in earnest. This entire exercise was demonstrated for the participants before they began to resolve any lingering feelings of uncertainty.

The group then proceeded with an exercise entitled, *Conducted Stories w/ Genre*. The class split into two groups of five. One group performed first and the other observed. The performing group was tasked with telling a collective story with a clear beginning, middle, and end. Each participant was assigned a genre to be the lens through which they would tell their

portion of the story. For example, mystery, children's book, or cookbook. The observing group provided the name of the story the performing group would be telling prior to the genres being assigned. The observers were guided to create a name of a story that had never been told before, so the performers could craft their unique tale through collaboration. After the first story was completed, the groups switched to provide everyone with an opportunity to participate in the exercise.

Conducted Stories with Genre allowed participants to experience working as a team to build a cohesive story while contributing their unique perspective and honoring the others' perspectives. This exercise relates to interprofessional teams and the doctor-patient dialogue. It empowers the giver and receiver.

The last session ended with a *Rock, Paper, Scissors Tournament* aka *Stone, Paper, Scissors*. In this classic game, partners face off by counting to three and then forming their hand to resemble either a rock (hand extended out in a fist), paper (hand extended out straight), or scissors (pointer and middle finger extended). Rock beats scissors because a rock can crush scissors, scissors beat paper because scissors can cut paper, and paper beats rock because paper can cover a rock, hiding it completely. In the tournament version played during this session, learners turned to the person next to them and played one round of rock-paper-scissors. The "loser" of each pairing became the cheering squad for the "winner." The winners proceeded to find each other and face off for another round. The losers followed each winner as their cheering squad. The cheering squads quickly multiplied. Play ensued until there was one final winner and everyone else celebrated as their cheering squad. This exercise embodied unity and support. It emphasized that when a supportive team mindset is maintained in a competitive environment, one can feel empowered and energized, as opposed to drained and defeated when one only

focuses on their personal success and failure. The objective for incorporating this playful experience was purely to celebrate the community the study had built, and to raise each other up. The study ended on a high note of cheers, hugs, and high fives. Following the last session, an email was sent to the participants providing a link for the students to access the portal through which they would schedule their final interview, and a reminder for the students to submit their final reflections.

CHAPTER TWO

Principles for Enhancing Understanding: A Literature Review

It is becoming widely accepted in medical communities around the world that compassion, active listening, and other relationship-centered communication skills are vital components to mitigating bias and providing quality care. In recent years, these skills have often been associated with the term "patient-centered care." The objective of patient-centered care is to invite patients to be an active participant in their care plan, to ensure the plan meets their individual needs. The patient-centered care model has proven to provide better health outcomes and patient satisfaction because patients' articulated needs are considered, and their care plan reflects something that they deem attainable. Thus, these patients are more likely to be able to maintain compliance (Reynolds, 2009). Although some of the ethical guidelines vary amongst different countries, the overall aim to utilize relationship-building skills to increase patient satisfaction is prevalent around the world, as will be demonstrated through recent global research reviewed in this chapter.

In 2021, a team of faculty from the Medical and Health Sciences, Department of Psychological Medicine at the University of Auckland, New Zealand, conducted a systematic literature review consisting of one hundred and fifty-two studies to isolate predictors of physician empathy, compassion, and related constructs (ECRC). The evidence indicated that most results relied on self-reported information. Most of the discovered predictors (88%) focused on physician attributes and factors that may not be changeable such as gender, experience, values, emotions, quality of life, and burnout. Patient-related predictors, which accounted for 24% of the determined unique predictors, included communication ease and physicians' perceptions of the patients' motives. Minority patients and those of lower socio-economic status

(SES) reported that compassion was less evident during their encounters with the physicians. These results suggest that the healthcare field would benefit from a study to determine ways in which to assist physicians in improving communication ease, trust, and compassion with their minority and lower SES patients (Pavlova, et al., 2021).

In recent studies, researchers have analyzed communication and emotional intelligence training for physicians and healthcare learners to determine if they can improve patient satisfaction. Emotional intelligence (EI) refers to the ability of a person to both perceive another's state of being and adapt one's own emotional state (Gorgas, et al., 2015). Although it is evident that some have more innate ability to exhibit these skills, some researchers are seeking to prove that emotional intelligence can be improved through awareness training and practice. One such study at Ohio State University College of Medicine, Department of Emergency Medicine, Columbus, Ohio included thirty-three emergency resident students at a large urban residency program. Nineteen participants were included in the EI intervention group, and fourteen in the control group. The EI intervention group engaged in a two-hour session focused on social perspective-taking, the act of putting oneself in the other's place and imagining how she or he feels (Myyrya, et al., 2010). Post-hoc tests showed a significant increase in EI scores amongst the intervention group, 62.6% to 74.2% from the pre-test to a post-test conducted six months after the workshop was held, while there was no statistical change amongst the control group. These results suggest that with proper training, individuals can increase their skills related to emotional intelligence (Gorgas, et al., 2015).

In the pursuit to better understand what is generally perceived as "good communication" in medicine, and how good communication affects patient satisfaction, researchers Tari Kasnakoglu and Pak (2019) conducted a mixed methods study with health professionals in

Turkey. The medical specialties included in the study were urology, primary care, endocrinology, aesthetic plastic and reconstructive surgery, cardiology, and psychiatry. In phase one of the study, ten physicians and eleven patients were interviewed. Tari Kasnakoglu and Pak used the qualitative data collected from the interviews, combined with recent literature, to find trends that indicate what behaviors are considered to be "good" and "bad" in the medical arena. From these determinations, two scenarios were created. The first was considered the "positive scenario" while the second was the "too positive scenario." In the positive scenario, the physician was on time and asked the patient "how are you?" when they entered. The physician listened carefully to the patient's list of symptoms and suggested follow-up testing in a "professional and well-mannered style" (Tari Kasnakoglu & Pak, 2019). When the physician entered the "too positive scenario" they greeted the patient standing with a big smile and asked if the patient would like to relax before beginning the consultation. The physician provided unnecessary information about hypothetical prognoses, made a joke about the patient's complaint, then laughed at the joke. These scenarios were presented to 432 participants of diverse demographics regarding age, education, gender, and income. The results showed that patients displaying positive emotions at the beginning of the encounter indicated more positive outcomes following the "too positive scenario" than following the "positive scenario." Conversely, for patients experiencing negative emotions at the beginning of their encounter, the "positive scenario" had a slightly positive impact on them while the "too positive scenario" had a negative impact. The researchers noted that these findings highlight the importance of a co-creative approach to build strong, long-lasting relationships with patients (Tari Kasnakoglu & Pak, 2019). Patients and physicians both benefit from feeling empowered to contribute to health-related conversations. While patients cannot formally diagnose themselves or identify a care

plan, they consistently share that they want to be involved in the decision making, and they want to understand their test results and treatments. Further, the co-creative perspective allows physicians to navigate with each patient's personal preferences regarding communication.

A systematic review published in the National Library of Medicine in 2019, reviewed a qualitative analysis of fifty-two studies concerning compassion and empathy training sessions. They sought to articulate the specific behaviors taught through compassion training that have evidenced improvement in physician empathy as perceived by patients. Five key behaviors were found to be effective:

> (1) sitting (versus standing) during the interview; (2) detecting patients' non-verbal cues of emotion; (3) recognizing and responding to opportunities for compassion; (4) non-verbal communication of caring (e.g., eye contact); and (5) verbal statements of acknowledgement, validation, and support…Seventy-five percent of the curricula assessed proved to improve physician empathy and/or compassion in at least one of these criteria, suggesting that such training is important and effective for health care professionals. (Patel, et al., 2019)

In August 2013-April 2014, the Cleveland Clinic mandated all employed, attending physicians to complete an eight-hour experiential communication skills training. Upon analysis of the impact of the training, it was determined that the "relationship-centered communication skills training improved patient satisfaction scores, improved physician empathy, self-efficacy, and reduced physician burnout" (Boissey, et al., 2016). The results of this study mirror those of my study with pre-health scholars, which I will discuss in subsequent chapters. The aligned findings of these studies suggest that experiential communication skills training can benefit health care learners and providers at any stage in their training and practice.

Although burnout was not an outlined objective in my research study, it was a theme that recurred among my participants' reflections, thus I feel it important to include this topic of study in my literature review. A systematic review conducted in 2017, showed a correlation between

emotional regulation and physician burnout. Articles reviewed, described practices such as mindfulness and other emotional regulation skills training helped reduce burnout (Jackson-Koku & Grime, 2019).

Another important implication regarding the caregiver and receiver relationship is the impact of implicit bias. Throughout the world, many studies have been conducted to measure and analyze the impact of bias specific to race, gender, weight, age, and socio-economic status in clinical encounters. In 2021, 294 medical students and psychiatric physicians participated in a study regarding psychiatric diagnosis, treatment, and compliance expectations. Participants were shown faces and were asked to diagnose each patient with a psychiatric disorder or mood disorder, prescribe antipsychotics or antidepressants, and assess whether they expected the patients would be compliant or not. Most often Black faces were diagnosed with psychotic disorders, prescribed antipsychotics, and assumed to be non-compliant. The prevalence was especially high in self-reported white participants and those with higher levels of training (Londono, T, et al., 2021). Another study looked at how physicians interpreted and trusted patients' accounts of chronic pain. Physicians and med students were asked to watch two videos and estimate the exhibited pain rate, determine if the patient was exaggerating, and suggest treatment options. Overall female patients' pain was rated lower than male patients, it was more frequently suggested that females were exaggerating, and men were prescribed analgesics more often, while women were prescribed psychological treatment (Schäfer G, et al., 2016). More examples of prevalent biases in the care industry will be explored further throughout this chapter.

Rocky Vista University, in Parker, CO, offered a Medical Humanities course to students earning their Master of Science in Biomedical Sciences (MSBS) as an attempt to address the concerns noted above, such as increasing compassionate behavior, reflective capacity, self-

examination, and mitigating bias. Three cohorts of twenty-six students were enrolled in the course between 2017 and 2019. Each cohort was split into groups of six or seven students at the beginning of the semester. The teams worked together closely throughout the duration of the course, taking team quizzes, and taking part in service-learning projects. They were tasked with meeting regularly and submitting minutes and written reflections concerning what was covered during each meeting. Surveys completed by the students at the end of each semester demonstrated that most participants agreed that Medical Humanities should be taught in a team-based learning format. Students reported that the format helped them to become more compassionate and they noticed their capacity to be reflective grew throughout their time meeting as a team (Horst, et al., 2019).

Similar to the Medical Humanities course described above, the curriculum I created for the purpose of this dissertation was conducted with pre-health scholars in programs such as biomedical sciences and was taught in a team-based learning environment. My course focused on the principles of attunement, compassion, and adaptability; the purpose was to increase practitioner's abilities to incorporate the above key behaviors into their clinical care work. In the following sections of this chapter, I will review the current literature analyzing these three principles, specific practices and training focused on these principles, and the cited outcomes of relevant studies.

Attunement

"Focus is meditation in action"- Viola Spolin

Attunement is a process of heightened engagement through which we can observe both the spoken and unspoken needs of another. The awareness that comes from attunement helps us to become more deeply connected with everything around us (Jacobsen, et.al, 2021). As

explained by psychotherapist and relationship counselor, Dr. Avraham Cohen, “Presence involves listening not only with ears and mind but also listening with heart, which means hearing the emotions and the essence of the persons who speak, hearing what is not said, and hearing those who do not speak overtly, and listening for what is in the quietness” (Miller, 2013). In the clinical context, this skill can help physicians better understand their patients and build a discerning relationship with them.

To build a relationship of trust and understanding, physicians must be attuned to more than what the patient is saying. A physician must also focus on non-verbal cues and consider the patients’ cultural and social background to understand their needs and personal expressive pattern of conversation or response. When emotions are expressed, a person's cultural background can affect his or her particular manner of expression in meaningful and perceptible ways. For a general example, Levine states, people from Western backgrounds tend to want to feel excitement and other positive states that are high in arousal, while many from East Asian cultural contexts tend to place more value on positive states that are lower in arousal such as feelings of calm and peacefulness (Levine & Ambady, 2013). It is common to perceive a reaction from one’s cultural context. To foster a sense of safety and trust, it is important for a physician to remain actively engaged and focused on each individual patient's adopted pattern of communication.

In a systematic review which included 222 empirical studies, eighteen non-empirical theoretical works, and twenty literature reviews, researchers defined a list of traits that predict an individual will be a compassionate physician. Amongst those traits were openness to experience and agreeableness, perspective taking, reflection, and mindfulness. There was also strong evidence that the environment can shape students’ compassion. Further, the study showed that

perceptions of a patient being “non-compliant,” “responsible for their illness,” or “difficult,” were predictors of a less compassionate provider experience (Wang, et al., 2023). Increasing present-moment awareness can also assist with perspective-taking and diminishing assumptions or biases. Although these skills listed above can be considered as dispositional, when provided with appropriate training in an appropriate setting, there is the potential for an individual to develop these skill sets.

Attunement exercises have also been utilized in several published studies as a tool for mitigating bias and strengthening physicians’ capacity for compassion. The results were mixed but evidenced a strong correlation between the effectiveness of each training session and the perceived safety as reported by participants. These responses emphasized the necessity of vulnerable sessions being conducted in a safe and transparent environment. At the University of Utah, faculty presented a workshop that focused on introspection and privilege. Each of the following groups attended a separate presentation of the workshop: fourth-year medical students, first-year medical students, faculty/staff, and residents/fellows. Each session began by establishing ground rules to ensure the safety of the group and offer transparency of the expectations. The rules included (1) be an active listener, (2) use “I” statements, (3) share airtime, (4) be respectful of others’ opinions, (5) respect confidentiality, and (6) courageously ask questions. They then engaged in a self-reflection exercise in which they were asked to think deeply about their identity and how it is shaped by their career, personal lives, and group memberships. Next, they engaged in a group reading and discussion. Finally, within each workshop, participants were engaged in an interactive group exercise in which they experienced inequity firsthand while trying to build structures out of marshmallows and pretzels. Each group was given a bag of supplies and tasked with the objective of building the tallest structure

possible; the number and size of the pretzels and marshmallows was not the same in each bag, therefore some groups had an advantage over others. After discussing the frustrations of the inequality they experienced, the groups were given bags with the same number and size supplies. They now had "equal opportunity." The catch was that the groups had to build onto their already existing structures. The second task demonstrated that providing equal opportunity without first correcting the initial disadvantage does not provide enough resources to help the disadvantaged group catch up. Without reparations to strengthen the foundation, the initial disadvantage is still a hurdle. In the medical context, disadvantage can apply to all social determinants of health including housing, transportation, and environment (air and water quality/exposure to discrimination and violence), economic stability, education access and quality, access to nutritional food and physical exercise opportunities, and language and literacy skills (Healthy People 2030, n.d.). Many participants reported achieving a heightened awareness of social and professional identities and acknowledged the impact of privilege. One participant reflected, "We can break down assumptions to become better providers." The results were particularly positive with the first-year learners, suggesting that the earlier topics such as introspection and privilege are addressed, the more effective these workshops are (Chow, et al., 2019). This finding mirrors my own observations when conducting Medical Humanities workshops for multiple levels of learners: the participants with the least clinical experience attain more positive learning outcomes.

Facilitators of a workshop for resident doctors in 2016, at the 37th Forum for Behavioral Science in Family Medicine in Chicago, used attunement exercises to train residents in how to care for previously incarcerated patients. During the workshop, participants were asked to answer personal questions about the facilitator's experiences with incarceration. Having no

knowledge of the facilitator's background or personal experiences, they had to create responses based on their personal perceptions of who this person may be. The doctors then held a discussion in which they explored how they came to formulate responses to questions posed without the benefit of important background knowledge. The discussion brought up the ways in which subtle judgments can lead to assumptions. These judgments may refer to life experience, character, and/or values. The awareness built through this experiential exercise helped the participants understand that they may mislabel or judge their previously incarcerated patients without knowing the truth behind their stories (Hofmeister & Soprych, 2017).

Analysis of a third workshop review entitled "Patrolling your Blind Spots such as clinical scientists, psychologists, psychiatrists, and medical doctors currently in clinical practice or retired. The main criticism of the workshop stemmed from the unmet expectations of the learners based on the outlined objectives. In post-surveys, participants noted that they had expected to share vulnerable and personal stories to get to the root of the biases they were holding; they felt that the topic was discussed in a more global sense. One participant reflected that this approach seemed to be an attempt to escape assigning blame and maintain a neutral space, but the participant felt neither protected nor invited to be vulnerable.

Another criticism relating to the outlined objectives of the workshop was that participants did not believe they received the expected tangible teaching tips that could improve their work with students. Some participants did share a positive note that following the workshop they would now think about culture in a more nuanced way, which they thought would improve their ability to care for culturally diverse patients (Hannah & Carpenter, 2013). This review reiterated the importance of outlining clear learning objectives, and adhering to those objectives throughout the course, to increase transparency and participant satisfaction.

Attunement is a frequently discussed benefit of mindful meditation, narrative medicine, and applied improvisation. Jon Kabat-Zinn, author of *Coming to our Senses* and creator of Mindfulness Based Stress Reduction (MBSR), explains that "when we are stuck in the vicious cycle of ruminating over the past and envisioning negative outcomes of the future, we start to feel that we have no control over our lives or emotional state" (Kabat-Zinn, 2005). Through the practice of maintaining moment-to-moment awareness in meditation, we can begin to step out of the fog of rumination and gain the ability to experience life to the fullest, in the here and now.

Mindfulness practice has been suggested as a tool to help physicians minimize their propensity of exhibiting bias on their patients (Burgess, et al., 2016). When one is mindfully aware of their emotion as it comes, one can reflect on where the feeling is coming from and can choose how to react, thus increasing self-regulation and mitigating reactive behaviors that can be observed as prejudiced. Magnetic resonance imaging (MRI) studies have shown that implicit prejudice responses involve the activation of the amygdala, the part of the brain that activates threat responses, and reduced activity in the ventromedial prefrontal cortex, an area of the brain involved in empathy. Functional and MRI studies have proven mindfulness meditation to be a direct tool for minimizing these negative activations on the brain. In response to distressing or emotional images, those who practiced mindfulness meditation showed decreased activation in the amygdala and increased activation of the ventromedial prefrontal cortex (Burgess, et al., 2016).

Viola Spolin, theatre artist, teacher, and commonly known as the Godmother of theatrical improvisation, often spoke about the power of awareness, which she referred to as "focus" in her classroom and her books. She said, "Focus acts as a springboard to the intuitive" (Spolin, 1963). When sharing her theory on how people learn she says:

> We learn through experience and experiencing, and no one teaches anyone anything. 'Talent' or 'lack of talent' has little to do with it. Through focused attention, a player can be in the present time, their intuition activated, and their whole-body alert and ready to play—physical states that benefit theatrical communication and liberate the individual to explore their environment and make new discoveries. In moments of pure spontaneity, cultural and psychological conditioning fall away, allowing for the player to explore the unknown. (violaspolin.org, Biography, 2022)

At the Alda Center for Communicating Science at Stony Brook University, a communicating science elective is offered to all students in the colleges of science and medicine. The focus of the exercises chosen for the experiential course is the importance of deep listening followed by authentic response. One of the practices in which the students engage is a basic, non-verbal improvisation exercise called *Mirror*. During this exercise, learners are paired up and stand facing each other. One is instructed to move silently and slowly. Their partner is directed to mirror them as closely as possible, so an outsider would find it hard to determine who is leading. Partners take turns being the leader. The objective of this exercise is "to teach participants how to respond to nonverbal communication, like facial expressions, tones of voice, and body language" (Kaplan-Liss, 2018, p. 442). At the end of the exercise, students reflected on how quickly their connections became focused and personal (Kaplan-Liss, 2018).

Narrative medicine can also provide pathways to seeing the "other." John Berger beautifully describes the impact of narrative practice in his 1960s book *The Fortunate Physician*, which he wrote after spending six weeks shadowing English country doctor, Dr. John Sassall. The work shares a collection of clinical vignettes, including a view of the transformation of Sassall's methods of care throughout his career. After a surprising encounter with a patient, Sassall realized that to be a better provider, he needed to engage in self-analysis to better understand the ways in which he comprehended the world. To accomplish this, he began writing personal narratives of his patient encounters. These "restories" allowed him to analyze how he

perceived his patient's accounts, and in turn discover the feelings the patients displayed in their stories, which he had previously overlooked. After engaging in this practice for six months, his patients' stories started evoking emotion in him and he was able to relate to their needs in a new way (Berger & Mohr, 1968). A family medicine residency training clinic in a rural section of Maine similarly used narrative approaches to increase patient outcomes. The community the clinic serves is largely living below the poverty line and has common challenges, including lack of transportation and poor diet. Many come to the clinic after having been dismissed from another practice for being "non-compliant" after missing appointments or not following treatment plans. Faculty at the clinic began training the residents in narrative medicine and the importance of story.

During their four to six weeks at the clinic, each student had to complete one standardized life story interview with a registered patient living with chronic pain. Patients participating were asked to share about important moments or people that made them who they are today. They also shared highs, lows, and turning points in their lives, and finally, stories that they wished their doctors knew about them. After being recorded, the participants were able to view and make changes to their narrative until it reflected the story they wanted to share. Once complete, the narrative was added to the patient's record. The patient's physician was sent a message that it was viewable, and the physician was prompted to read it in its entirety and refer to it when caring for the patient.

The doctors and participating patients rated their relationship at the beginning of the study, and every three to four months for a year. The results showed that in the first three to six months the physician/patient pairs were tracked, the relationships showed no improvement in empathy, or perceived pain levels. However, at the end of one year, the pairs showed significant

improvement in the quality of their relationships and the level of patients' pain. Further, all patients reduced their intake of opiates, benzodiazepines, and hypnotics during the study period (Mehl-Madrona, et al., 2021).

Poetry can also be a tool for self-discovery and strengthening one's self-identity. When crafting poetry, one must slow down and focus on framing and perspective. Each word requires reflection and intention. This practice provides space to process thoughts and emotions, and can bring new insights to an author's awareness, allowing the author to broaden perspective and see an issue from a new angle (Allan, 2022). Poetry, when generated for the purpose of reflection, can help the author sift through possible misconceptions, articulate nuanced emotions, and illuminate a path to clarity.

Attunement can be seen as the first step in thoughtful communication. When practitioners are fully engaged during a clinical encounter, important non-verbal nuances such as body language, tone of voice, and physical proximity can provide information regarding what each participant is feeling. These cues, if acknowledged, help mitigate miscommunication and foster a more comprehensive sense of the other's point of view. Experiential and artistic exercises can be utilized to expand one's ability to maintain attuned focus and be open to receiving all the nuances of the present moment.

Compassion

"If you want others to be happy, practice compassion. If you want to be happy, practice compassion."—Dalai Lama

Compassion and empathy are widely considered to be vital components of effective patient care and provider wellness. Humanistic behaviors such as altruism, integrity, accountability, and respect for others have been attributed to compassionate professional behavior (Horst, et al., 2019). When considering traits that may contribute to dispositional

compassion, many demographic components have been considered in recent research. A systematic review including sixty-four independent studies of patient surveys within fifty-one publications analyzed how patients scored empathy of medical professionals amongst a wide pool of demographics and settings. The meta-analysis included studies comparing length of consultation, gender, type of provider, and geographical location. Not surprisingly, long consultations received a 15% higher empathy score than short consultations. Studies with greater than 50% female practitioners showed 15% higher scores than those with a higher percentage of male providers. The studies included Allied Health Professionals, medical students, traditional Chinese doctors, and physicians. Allied Health Professionals received the highest empathy scores while physicians scored the lowest. Finally, studies with the highest empathy ratings came from patients in Australia, the USA, and the UK, while the lowest patient empathy ratings came from Hong Kong (Howick, et.al, 2017). A gender analysis of the impact of physician empathy on patient outcomes showed no significant difference in patient outcomes between genders. However, in the self-reported data collected from the participating physicians, male physicians consistently reported empathy as lower on their priority list than female physicians. The results also showed that the male physicians exhibited more verbal empathy while the female physicians displayed more examples of non-verbal empathy (Surchat, 2022).

Another systematic review completed in 2022, including 222 studies, focused specifically on predictors of compassion and related constructs in medical students. 95% of the studies looked at student-related factors. The student factors determined in this review to be predictors of higher levels of compassion “included maturity; work and life experiences; personality traits of openness to experience and agreeableness; skills such as perspective-taking, reflection, and mindfulness; and positive role modeling. Negative attitudes/emotions, burnout, stress,

detachment, operating in cultures prioritizing knowledge and efficiency over humanistic care, negative role models, time constraints, and heavy workloads" were determined to be predictors of lower levels of compassion (Wang, et al., 2022). Only 9% of studies looked at patient-related factors, and they determined that patients labeled as "non-compliant" or "difficult," and patients perceived as responsible for their illness received less compassion from providers. The authors pointed out that most of the current research focuses on dispositional and sociodemographic student traits, most of which are considered to be fixed and not able to be impacted by intervention and training. The authors suggest that more research be focused on those skillsets related to compassion that are amenable to intervention such as perspective-taking, reflection, and mindfulness (Wang, et al., 2022).

In alignment with the findings of Wang and her team, I chose to study specific practices and to measure the success of each in assisting healthcare learners in improving their ability to express compassion. Contemplative practice, applied improvisation, and narrative medicine have been proven to help healthcare professionals and learners embody compassion and acceptance for themselves and their patient community.

The principle of compassion is incorporated into many structured contemplative practices. Buddhist Monk, Matthieu Ricard, has participated in valuable research on empathy and compassion. His practice includes focusing on altruism, an unselfish desire to help (Ricard, et al., 2014). Ricard joined Neuroscientists Singer and Klimecki in conducting a study in 2014 at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig, Germany to determine neurological and emotional differences evoked when meditating on empathy versus those evoked when meditating on compassion. The results showed that participants focusing on compassion had more benevolent and positive emotions when watching videos of others

suffering. The cohort focusing on empathy articulated negative feelings and thoughts after viewing the videos. Further, neurological scans corresponded with the participant's reactions. Those who practiced compassion showed activity in the areas of the brain associated with positive emotion, while those who practiced empathy showed more activity in areas of the brain associated with negative emotion and fatigue (Ricard, et al., 2014). In further research with Ricard as the study participant, neuroscientists confirmed that when he meditated on unconditional compassion, cerebral areas linked to positive emotions were activated (Ricard, 2015). The discussion of empathy versus compassion became a particular point of interest with my research participants, which will be discussed in later chapters.

Loving kindness is another specific practice that helps to resonate and send compassion, well-being, and love to those visualized during the practice. A practitioner uses a mantra and focuses first on those closest to them and then moves this mantra further out, for example, to acquaintances, then to those that the practitioner finds challenging, to strangers, and to encompass the Earth (Miller, 2013). Rather than being distracted by the expectations and superficially trying to convey presence, contemplative practitioners learn to shed inner dialogue and mental checklists so they can fully attune to another and "bear witness, help carry an emotional burden, and begin a healing process" (Miller, p.8).

Kabat-Zinn addresses self-confidence, self-esteem, acceptance, and understanding one's relationship to thought in his Mindfulness Based Stress Reduction Program (MBSR) (Miller, 2013). Mindfulness meditation helps the practitioner foster non-judgmental awareness. It teaches one to accept thoughts and feelings as they come; examine them in the present moment to gain an understanding of where they are coming from and trust that these negative experiences are "visitors" that, once acknowledged, can be released (Burgess, et al., 2017). David Forbes

introduced mindful meditation to high school football players in 2004 and found that “the boys became more mindful of feelings such as hurt and anger, of hurtful behaviors, and of the need to take responsibility for one’s feelings” (Miller, 129). Medical professionals who view their patients with non-judgmental awareness are more able to comprehend different perspectives, better preparing them to partner with their patients to co-create a proper care plan. Furthermore, as Forbes discovered with his football players, mindful individuals are more aware of their behaviors, providing them a higher capacity to acknowledge and hold themselves accountable for their mistakes.

Isolating and understanding these behaviors are a great step toward identifying implicit bias and intentionally implementing changes in reaction, which may help to mitigate healthcare disparities. Implicit biases are “habits of the mind” which are cultivated by our past experiences and social culture. Despite intentions of being inclusive, bias can become activated when one nears a member of a specific social group and can impact one's behavior when interacting with that individual (Burgess, et al., 2017). Present-moment awareness gained through mindfulness can help providers recognize a thought, analyze the thought, and release it before the thought turns to action. The provider can then move forward with compassionate intention, which not only increases better patient outcomes but also decreases the risk of burnout as cognitive load, stress, and anxieties caused by discomfort during interactions with those that are perceived as different are reduced (Burgess, et al., 2017).

Many studies have proven the effectiveness of loving-kindness and guided meditation in mitigating implicit bias. Residents of a Non-Black community in New Haven, CT elected to join a study which tested the effectiveness of a six-week, loving-kindness training program. The results showed that residents who participated in the training program showed much more

significant decreases in implicit bias towards Black individuals and the homeless compared to the control group (Kang & Dovido, 2014). In another study at the University of Sussex, Brighton, East Sussex, UK, white college students were asked to engage in a three-minute loving-kindness meditation focusing on a picture of a Black person. Even after only three minutes, these students also showed lower levels of implicit bias toward Black persons than those of the control group. Students assigned to eight minutes of loving-kindness meditation with a homeless person expressed less intergroup anxiety and new intentions of future contact with the homeless community after the experience (Stell & Farsides, 2016). At Central Michigan University, white college students displayed less racial discrimination in a simulation trust game and showed lower levels of implicit age and race bias after participating in a ten-minute guided meditation recording (Lueke, & Gibson, 2015).

Improvisation can also help learners cultivate a more compassionate and altruistic mindset. One principal rule of improv is "Make your partner look good" (Watson, 2011, Class 1). Using the Jefferson Scale of Physician Empathy (JSPE) to measure the increase of empathy scores after an applied improv course with the Obstetrics and Gynecology Residency Program at Women & Infants Hospital of Rhode Island, results showed a significant difference immediately post-intervention. For this workshop, exercises involving enthusiastic affirmations were utilized. One exercise involved participants taking turns announcing a mundane task they had completed that morning, like brushing their teeth, and the audience would proceed to cheer and clap for that person, exclaiming, "Right!" In the debrief discussion following the exercise, participants remarked at how impactful the smallest amount of empathy could be, how easily rapport can be built when one is invested, and the importance of building a compassionate connection (Cai, et al., 2019).

In a multi-institutional and interprofessional study conducted by University of Pittsburgh, School of Dentistry and MN Hospital Medicine, University of Minnesota, Saint Paul and published by *The Clinical Teacher* in January of 2024, Dr. Ankit Mehta and his team demonstrated through quantitative analysis that improvisation workshops can improve clinicians' emotional intelligence. Participants were diverse in specialties and levels of practice experience. Medicine-pediatric residents, pediatric educators, practicing pediatricians, and internal medicine clinicians participated. The virtual training lasted two hours and was taught by three physicians with improv experience. The curriculum consisted of an introduction, five medical improv exercises, and a session wrap-up with group reflection. Participants were given instructions and then sent to breakout rooms to complete the exercise. The groups then reconvened for a large group debrief following each exercise. Forty-one participants completed pre- and post-surveys (64%). The scores reflected that participants' EI scores rose an average of 4.9 points from the pre- to post-survey (Mehta, et al., 2024).

Generative empathy is defined by Roy Shafer as "the inner experience of sharing in and comprehending the momentary psychological state of another person… experiencing in some fashion the feelings of another person" (Rudnytsky & Charon, 2008). The provider achieves a state of attention in which the patient is speaking through them, helping the provider find the words to express the problem. Rita Charon suggests close reading helps to develop this capacity for attention, helping to train the provider to silently absorb the content presented and examine perspectives through a new lens (Rudnytsky & Charon, 2008).

Engaging with poetry, whether reading silently or hearing it read aloud, can also expand the lens through which we see the world and can foster compassion. A 2017 study showed that the physical responses one experiences when hearing poetry read aloud "are connected to the

rewards-sensing area of the brain" (Wassiliwizky, E., et al., 2017). This experience engages us in a unique way that is visceral and impactful. Reading poetry varying in point of origin, cultural perspective, and style can broaden one's scope, as the reader views the world from the lens of the author.

Adaptability

"Begin challenging your own assumptions. Your assumptions are your windows on the world. Scrub them off every once in a while, or the light won't come in." ~Alan Alda

In the previous sections, I have discussed how attuning to the patient's verbal and non-verbal cues and embracing a compassionate mindset to create a more authentic lens, are important steps to building trust and opening the doors to an effective and impactful doctor-patient relationship. A third step in fostering this necessary bond is honing the ability and willingness to adapt to each patient by considering their specific needs, cultural differences, and personal preferences. Adaptability can include tolerance to the feeling of uncertainty, mitigation of reactivity, and decreased judgment of ourselves and others.

One tool, or method of achieving this goal is to move forward with a growth mindset. If one enters each interaction with the intention of learning and growing, as opposed to convincing others of their viewpoint, every moment becomes a gift. Engaging with those perceived as "different" can cause anxiety and bring about an uncertainty of how to act or interpret the other's actions, or fear of doing the wrong thing. When physicians enter an encounter with patients with whom they don't feel they can relate, approaching the interaction with curiosity and a willingness to learn can decrease the physician's anxiety; perceiving the physician's sense of comfort, the patient will feel more comfortable during the interaction. Approaching clinical conversations with curiosity may be a key factor in building trust (Levine & Ambady, 2013). Leading with curiosity can also help physicians become aware of the need to adapt in a clinical

encounter. Asking patients more questions about their lives and their understanding of their illness builds transparency and can bring cultural, social, racial, and religious differences to light so they can be incorporated rather than unintentionally ignored. Proceeding with curiosity can help to mitigate missteps that have the potential to isolate a patient (Levine & Ambady, 2013).

Even when a physician is attuned to a patient and open to learning in the moment, the physician may discover that they have misstepped along the way, despite their best intentions. It is important for physicians to hold themselves accountable, but with the same compassion that they embody for a patient. Once a physician acknowledges a mistake, the anxiety built by the accident is released (Levine & Ambady, 2013). The acknowledgement also awards a physician the opportunity to be forgiven (by the physician themself as well as by the offended). As a result, accountability for one's own misguided words or actions builds trust and respect.

As is true with attunement and compassion, the quality of adaptability can be fostered through experience with contemplative practice, narrative medicine, and improvisation. Practitioners of mindfulness meditation become reflective as opposed to reflexive. If people are attuned to the environment and react intuitively in the present moment, they may adapt to the immediate needs of that moment. For example, a teacher attuned to the needs of their students can pivot the lesson plan to ensure the students are able to meet the intended learning objective (Miller, 2013).

Mindfulness practice teaches learners to put space between their thoughts, emotions, and reactions; practitioners' capacity for attention is increased and they start to gain emotional clarity and stability (Austin, 2013). Mindfulness practice also increases one's aptitude for individuation, "a mode of cognitive processing in which attention is focused on individual characteristics rather than group membership" (Burgess, et al., 2017). This new awareness can help practitioners to

accept things as they are and make a conscious choice about how to react (Kabat-Zinn, 2005). Further, if the emotion experienced is negative, once it is identified it can be released, and tends to fade (Austin, 2013). Meditators practice acknowledging ruminating thoughts and negative emotions with curiosity, and releasing them without judgment (Miller, 2013). Practitioners learn to embrace all states of being as valid because each presents an opportunity to gain insight and knowledge (Kabat-Zinn, 2005). Additionally, the practice of releasing negative thoughts and emotions reduces cognitive and emotional load. Given the listed benefits, mindfulness practice can be a powerful tool for mitigating actions of bias in a clinical environment. For example, a mindful physician is less likely to experience burnout and anxiety when working in an overcrowded, understaffed clinic. This factor alone decreases the chances that implicit biases would arise because the physician is alert and calm. If physicians do have biased thoughts or emotions, they are more likely to be aware of them and are then able to process, accept, and release the thoughts before they result in actions (Burgess, et al., 2017).

While engaged in applied improvisation exercises, learners also practice releasing preconceived ideas and adapting to the needs of those with whom they are sharing the scene. There is a great emphasis on teamwork and spontaneity. Publications as early as 2008 demonstrate how improv has been used as an effective tool for interpersonal communication training in medical education. Hoffman, et al. (2008) describes an improv-based communication skills elective at University of California San Francisco. The ten, one-hour sessions were broken into three themes, similar to those of this study. The themes included portraying ourselves, perception of others, and interpersonal interactions. Post-survey responses indicated that participants thought the course both improved their communication skills and increased their confidence in patient interactions. One student shared that improv storytelling “helped with

active listening and appreciating other people's train of thought" (Hoffman, et al., 2008). Many exercises involve co-creation, in which participants build responses and stories one word or one sentence at a time (Watson, 2011). One cannot anticipate what will come next; it is necessary to remain focused on what is presented in the present moment, rather than on preconceived decisions and assumptions. When participants open themselves up to intentionally listen and appreciate another's perspective, they are able to adapt their own ideas to build on something new. The "yes, and" rule of improv teaches this skill directly. When someone presents an idea or statement, it is unacceptable to turn their idea down and present a new one. Instead, improvisors are taught to accept the presented idea and then build onto it. The "yes, and" agreement, to affirm one's partner and build onto their comments, directly translates to the clinical environment. Pediatrician Dr. Erica Chou describes her transformative experience practicing, "yes, and" in a commentary article published in 2020:

> At first, I felt a lot of internal conflict about going along with other people's suggestions when I had something different in mind. But then I saw the way 'Yes, and' moves a scene forward, and how my improv partners responded when what they said was accepted, and so I became a believer of the power of 'Yes, and.' Outside of the improv classroom, I've continued to utilize 'Yes, and' in both my professional and personal lives. As I talk with patients and families who have different views on vaccinations or antibiotic treatments, I've found that the discussions are better when, even if I don't agree, I can affirm their truths. (Mehta, et al., 2020)

Results of a pilot study on Interprofessional Improv at University of Wisconsin-Madison further proved the validity of using improv to increase comfort with adapting as a team. The objective of the fifteen-hour course offered to health professions students was to use improv techniques to teach interprofessional empathy. The post survey results indicated that the participants' personal distress levels decreased significantly. Students commented that they felt more comfortable thinking on their feet and believed that the experience impacted their

relationships in and outside of work (Zelenski, et al., 2020). My study resulted in similar findings, which I will share in the following chapter.

Improvisation also creates a space in which one can explore with curiosity and release all judgments. There are no mistakes or wrong answers in improvisation. Stumbles are perceived as areas for growth (Neel, et al., 2021). Often self-perceived failures are celebrated with a valiant "failure bow" and supported by raucous applause. In the same commentary as quoted above, Internal Medicine physician, Dr. Belinda Fu explains the impact of embracing "the failure bow" on her life.

> I've since taken a million failure bows, on-stage and off, as I integrate this philosophy of humility and kindness into my life. I no longer anxiously hide every mistake, I don't pretend to know all the answers, I forgive myself when I fail, and I support others when they falter. I have learned to celebrate imperfections as opportunities for growth, instead of causes for shame.
> (Mehta, et al., 2020)

University of California San Diego School of Medicine began offering a medical improv elective course in 2019. The goal of this elective is to "prevent and/or mitigate the negative effects of stress, burnout, and fatigue, and provide a learning environment to develop skills necessary to succeed as a physician" (Neel, et al., 2021). At the beginning and end of the course, students were asked to answer questions on the following domains, using a five-point Likert scale: "1) engagement with studies; 2) connection with other students; 3) wellbeing; 4) adaptability; 5) communication; 6) confidence; 7) proactivity in their professional career; and 8) development as future doctors." All categories showed vast improvements from the pre to post questionnaires in all sessions reviewed (Neel, et al. 2021).

Narrative competence is defined by Charon as the ability to recognize, interpret, and be moved to action by the predicaments of others (Rudnytsky & Charon, 2008). Negative capability, a term coined by nineteenth century poet and physician, John Keats, refers to the split

providers experience when they perform the necessary yet challenging tasks of caretaking, such as resetting the broken arm of a screaming child or sharing the news of a terminal diagnosis to a hopeful patient, while still maintaining their emotional humanity. Providers allow themselves to be present in the moment; they feel with the patient. They may shed tears as they share the necessary silent space to digest the moment. At the same time, they are thinking about the other tasks that need attention; they may be considering the reality that they need to move to the next patient in fifteen minutes. A geriatric internist at the University of North Carolina, Chapel Hill, Dr. Terrence Holt, says negative capability should be embraced and cultivated. Further, in alignment with Charon's theory, he suggests reflective writing can help foster this mindset. Reflective writing allows the author the opportunity to simultaneously think and feel. Authors can experience and observe their actions through writing. The practice of reflective writing allows the writer the freedom to adapt in each moment, and the skill to best articulate their needs and the needs of their patients (Rudnytsky & Charon, 2008).

Photography has also been utilized as an effective intervention tool. A resident pilot study at an undisclosed university in 2014 found narrative photography to be an impactful resource while attempting to modify implicit and explicit attitudes towards Latino patients. In the first phase of the study, a girl's migration story from Mexico that spanned eighteen years was shared with the students through a series of pictures. In the second phase of the study, the students were handed a picture of Latino adolescents to reflect upon while they listened to recorded responses from the pictured individuals. The adolescents had recorded their responses to the prompt, "What I wish my doctor knew about my life." Following the study, the intervention group did demonstrate more ethnocultural empathy, healthcare empathy, and patient-centeredness (Lightfoot et al., 2017).

Just as patients have unique needs and preferences regarding how they commune in a clinical environment, medical professionals also have individual preferences and learning styles. Teaching models that work for some may not fit for another. The variety of experiential practices that researchers have determined to be effective for training medical professionals in the development of emotional intelligence and present-moment awareness offer plentiful options from which clinicians can benefit. If health colleges and hospital systems were to create robust health humanities programs, offering multiple training and course options for emotional and mental growth, I contend that there would be a vast improvement in clinician mental health and patient health outcomes.

CHAPTER THREE

Medical Humanities Pilot Study

This chapter details the results of the Medical Humanities pilot study conducted, for the purposes of this dissertation, with pre-health scholars at the University of South Florida. The first section describes the participants involved in the study. The following sections review the qualitative analysis applied to participants' written responses throughout the course and post-study interviews.

The most dominant finding that arose throughout the responses regarding humanities experiential practices, was that students felt empowered to feel and explore their emotions and body language, which provided them visceral and immediate learning opportunities in a way hypothetical discussions cannot. Outside the defined research questions, one of my main curiosities was how the mixed humanities practices would work together to shape learning outcomes. Participants noted that the improv exercises helped to build a sense of community and a better understanding of others. Improv challenged them to keep an open mind and be ready to adapt to those around them. They learned to take other peoples' perspectives into account. Overall, the mindfulness practices seemed to impact the participants most in promoting personal wellness. Students shared that meditation helped them embrace the present moment. They also reported gaining a better understanding of and ability to regulate their emotions. The reflective writing assignments helped the learners process what they had experienced and articulate what they learned. Writing their thoughts encouraged the students to take the time between sessions to process what they had absorbed thus far and synthesize connections to the material.

The research study incorporated three themes: attunement, compassion, and adaptability. Session One: Attunement, sought to broaden awareness of the self and the other. Session Two:

Compassion, exposed learners to exercises with the objectives of reserving judgment and embodying a sense of altruism. Session Three: Adaptability, challenged learners to take the next step in speculating how they may adapt their communication to enhance rapport and understanding in their personal lives and the clinical arena. The participants' responses describe their interpretation of each theme as well as demonstrate how the Medical Humanities practices assisted in their learning.

Participants

After a year of unsuccessfully trying to execute the study with medical residents, it was necessary to embrace the tenet of adaptability and accept a different approach. Shirley Smith, the Director of Diversity and Student Enrichment for the Morsani College of Medicine, University of South Florida, leads inspiring outreach programs with the pre-med undergraduates and local technical high school students. Smith informed me that the undergraduate pre-health scholars would likely be excited to join the study and offered to help recruit a cohort. Although I was hesitant to shift the program into which so much effort had already been invested, it was decided that adapting the curriculum to meet the needs and learning level of undergraduate, pre-health students was the best option. The IRB was updated, dates selected, and a space was reserved on USF Main Campus, where most of the students reside. Smith sent out the recruitment letter, along with a copy of the consent form for review, to the pre-health student listserv.

The call to participate received thirty-one survey responses, of which fifteen met the required hours of shadowing experience in a clinical setting (Aspiring Docs, n.d.). The target number was eight participants, so qualifying applicants were selected according to the order in which they submitted their interest. Two candidates declined after being selected; therefore, two additional candidates were invited. The hours of shadowing experience of the participants ranged

from thirty hours to one hundred and ninety-two hours. Specifically, four participants had completed thirty to forty shadowing hours, three had completed fifty to seventy hours, and one participant had completed one hundred and ninety-two hours of shadowing. On the first day of the study, two pre-health scholars with zero shadowing hours attended, although they were not part of the selected group. Because ten participants would still be an appropriate number for the study, and the individuals were eager to participate, they were invited to become active participants in the study. Their lack of shadowing hours was included in the list of variables that would need to be considered when reviewing the end of study data. All ten final participants were currently enrolled in pre-health undergraduate programs at the University of South Florida. The breakdown of their majors is as follows: three Biology, five Biomedical Sciences, one Health Science, and one Exercise Science. Their expected graduation dates ranged from 2023-2026; two-2023, one-2024, two-2025, four-2026. The wide variance in experience regarding the learners' individual academic journeys enhanced group discussions and enriched the peer learning dynamic, which will be discussed more thoroughly in the next section. The intended health profession career path also varied amongst the participants, with five declaring medicine (undecided specialty), one selecting Obstetrics/Gynecology, one planning to become a Physician's Assistant (PA), one studying Pharmacy, and one working toward becoming a Doctor of Osteopathic Medicine (DO). This variety of interests and perspectives also added rich insights to the class discussions. A large majority of the participants identify as female; eight females and two males. The sexual identity of the participants did not appear to impact the results of the study as sexual identity and gender never arose as a talking point in class discussion, participants' journal entries, or interviews.

Qualitative Analysis

Ten pre-health scholars at the University of South Florida participated in my pilot research study entitled, *Medical Improvisation, Narrative Medicine, and Contemplative Practice in a Health Education Training Environment: A Medical Humanities Approach to Increasing Practitioner Awareness and Strengthening Interpersonal Connection* (Study # 004892). All ten participants attended the three, two-hour sessions and completed the one-hour post-interview. Eight of the participants completed all writing assignments. One participant did not complete the final reflection essay and one participant did not complete any of the writing assignments which included two journal entries, a poem, and a final reflection essay. These two participants did not receive the certificate of completion at the end of the course as it was stated in the pre-course consent form that to receive a certificate, a participant must turn in all course components by the established deadline. The participant who did not complete any assignments was removed from the study analysis because sufficient data could not be collected. The participant who completed all components except the final reflection essay was still considered in the analysis as the journal entries and post-interview provided sufficient data to justify this participant's experiential journey.

The participants' written reflections and transcripts from the final interviews were analyzed across multiple domains. The data was evaluated from three perspectives: course logistics (intentions/expectations, timing, environment, suggestions for future), course themes (attunement, compassion, adaptability), and course practices (improv, mindfulness, literature, reflective writing). This chapter will explore each of these perspectives individually to analyze participants' articulated intentions, perceptions, realizations, and outcomes. The following chapter will discuss the unanticipated themes of mitigating burnout and self-improvement that

arose from connections students made to the curriculum that were not outlined as learning objectives of the course.

The first question asked in the post-interview was, “Why have you chosen to take this course?” The responses to this question provided valuable insight as to what was most important to the learners and what they hoped to gain during the sessions. Their articulated goals could be divided into three categories: career development, personal development, and personal interests. Most expressed multiple motivations for their decision to participate. Five of the ten students stated career development as a reason for participating. Three said they wanted to enhance their Curriculum Vitae (CV) with research participation. Two specified that they have an interest in medical ethics/humanities and wanted to learn more about medical research. All the participants who stated career development as a goal also voiced an interest in personal growth. In fact, nine out of ten participants shared the desire for personal growth as an incentive to take the course, although the specific goals varied. Six articulated a more general goal of learning something new, such as, “I want to broaden my scope.” Another said that from the title they could tell the course would “benefit my practice and my patients.” One shared that they wanted to “gain skills essential to being a good physician” and another noted that the philosophical and psychological side of medicine was very important to them, so they felt called to partake in the course. Three participants stated that building communication skills was their main expectation. One participant shared in their final interview, “My expectations were set high. I wanted to acquire skills necessary to hold important and nuanced conversations with patients.” Two specified that they hoped the course would guide them in developing a good bedside manner and learning to handle ethical issues appropriately in clinical conversations. Two participants shared that they wanted to work on handling their emotions and stress at work and elevate their self-

awareness. Emotional stability and resiliency were not articulated topics of focus for the course, but as the class discussions leaned into the needs of the group, there were profound outcomes in these realms. The following chapter will demonstrate how discussions concerning emotional regulation and boundary setting also included underlying and unanticipated discussions regarding the theme of resiliency. Other participants shared specific practices listed in the informational letter appealed to them, such as journaling, improv, and Medical Ethics/Medical Humanities, which prompted them to sign up.

When asked what the participants' expectations were for the course structure, their ideas were overall more vague, but most indicated that they had anticipated a much more structured classroom environment, like what they experience in their standard courses. One said, "I thought we were going to sit with a partner and learn off of a PowerPoint." Another shared, "My expectations were simple given that this is my first time participating in a research study. I had anticipated exams and lots of questions to be asked, measuring our responses. I also thought that some type of knowledge regarding Medical Humanities would be needed." A few interpreted "improv" to mean that they would perform role plays with a partner similar to simulated patient scenarios and expected discussions about their role on a care team. It was surprising to observe how many participants bravely chose to participate without having a clear picture of exactly what would be expected of them and were led by a trust that it would be a growth experience. One reflected, "Going into the session, I had no idea what to expect. Aside from the readings and the informed consent, I went in with an open mind knowing that this will benefit me, my practice, and my patients." Another said, "I just thought it'll help me broaden my perspective. I didn't really have too many expectations. I didn't know what exactly we were going to do, I suppose." This willingness to trust and desire for personal growth was present in all participants and made

for an ideal space for co-creation. These responses did, however, raise the question of whether the course description could have been written in a manner that would have made the content more transparent; more specific wording may have lessened anxiety caused by uncertainty. The informational letter stated that this was to be an experiential course. The letter listed all the practices that would be involved, yet I believe it was taken for granted what the learners' baseline understanding of these practices would be, as well as the picture the word "research" recalls for most who work in the clinical arena. In the future, a clearer and more complete explanation of each incorporated practice will be provided. When asked how much detail would have been helpful in making the participants feel more confident coming in on the first day, their responses varied greatly. Some said they liked coming in with curiosity and an open mind. One shared that more detail about the immersive activities in advance may have scared them off and they were happy to be introduced to them in class, after their guard was down. Some said they would have preferred a brief synopsis of the three sessions, while a couple said a full syllabus would have been appreciated.

When questioned about how their expectations were met, the responses of the group members were much more in alignment. They all reflected that the study exceeded their expectations in some regard. The "collaborative, relaxing setting" was a welcome surprise to some. Others shared that they learned about aspects of care and/or aspects of themselves about which they were not previously aware. One participant shared the following:

> I would definitely say my expectations were really exceeded because although I knew it would challenge what I already knew before coming in, it was really eye-opening. It made me more reflective of myself and how I interact with others; little things that I can notice and can apply to patient care. It definitely helped out in a lot of ways I didn't think were possible.

Another wrote in their Session One journal entry:

> The first session proved to be a profound experience, one that overflowed with valuable insights, emotional depth, and above all, self-discovery. Realizations have been eye-opening and have encouraged me to be more mindful of my emotions and body language in both my medical practice and daily life.

A third commented:

> I thought it was valuable for the reason that I didn't realize these things about myself; learning new things about myself that I didn't even realize that I needed to work on or even just consider. It was very insightful and interesting, so I'm happy.

Many also shared that they were surprised at how much fun they had.

In the post-interview participants were asked about their overall impression of the logistical organization of the study; in particular, if the environment, timing, number of sessions, and course load were safe, impactful, and manageable. It was also inquired whether the participants had any suggestions regarding ways the experience could have been enhanced or improved. As referenced in Chapter Two, it is imperative that a safe learning environment is maintained when conducting an experiential course, particularly one that asks participants to venture into vulnerable areas of self-discovery and discussions of implicit bias and interpersonal communication. Despite some apprehensions when coming into the space on day one, all participants felt that they were safe and always respected, and they shared examples of what helped them to feel comfortable while sharing with their peers and exploring new practices outside their comfort zones. On the first day of the course, the informed consent form was reviewed with the group, and participants were provided with the opportunity to ask questions. This effort was appreciated by many; however, the biggest takeaways stemmed from efforts to make the space feel relaxed and peer focused. Some liked the fact that they were encouraged to wear comfortable, athletic clothes. Many loved sitting in a circle on yoga mats for group discussions. The importance of how I presented myself as their facilitator was also addressed in many reflections. It was clear that the group felt more welcome to share their insights and ideas

when I presented as “the guide on the side,” rather than the “sage on the stage.” Some said they appreciated that I sat on the floor with them. One shared a very specific moment that helped solidify the sense of a safe space for them.

> In deep dialogue, you being so present really helped. It never felt like I couldn’t say anything because once, I did say something while you were trying to get a point across, but I took us backwards. You corrected me in a way that was trying to relate to what I was thinking. It was just such a comfortable setting and is honestly what contributed to a lot of growth.

This specific feedback was very affirming as an educator because it showcased exactly the impact I want to have on my learners. When constructive feedback is necessary, it should be delivered clearly and specific, but also empowering and easy to digest. This format encourages rather than intimidates and promotes rather than stifles learning growth. Many group members also noted appreciation for each exercise being clearly explained and demonstrated before group members were asked to participate. Preparing the students in this way helped them understand what was expected and demonstrated my willingness to participate. One learner mentioned that when my research assistant Christie and I demonstrated an exercise, we became part of the group. We were no longer spectators; we were sharing the experience. Interestingly, the first exercise was named multiple times as the main catalyst for creating a safe space. The course began with a silly improv game called, “Alliterative Introductions” in which each participant was asked to share their name with an alliterative word and gesture (ex. Bouncing Briana), and then everyone would repeat their name and gesture. The full description of this exercise is provided in Chapter One. Participants expressed that by the end of this game they felt that the group members were no longer strangers. They knew the names of one another, and had already been through a silly, yet vulnerable and challenging experience. Many said this game set the tone and expectations for the rest of the course. The number of participants also impacted the feeling of

intimacy; many stated that the small class size helped them feel closer and eliminated any perceptions of judgment. Participants perceived that they were a team moving through the experience together. Many also noted that fewer than ten participants may have caused them to feel too exposed. The feedback received concerning the impact of the opening game and the class size included incredibly valuable insights for consideration when creating curricula in the future.

Regarding the timing, number of sessions, and course-load, the fact that the study took place during the summer session seemed to best accommodate the students' schedules. Many said that the course was manageable because they were either on break or were only taking one summer course. One participant mentioned that they wished none of the readings were optional because the class literature discussions were so rich. They wished to have an in-depth conversation with their peers about the optional reading, but most participants had just skimmed through the article to comprehend its objective. To compensate, I offered to discuss the reading with them after class. Most of the suggestions received regarding these logistical aspects of the study indicated that the learners wanted more. Some wanted more sessions overall; others would have preferred each session to be held for three to four hours rather than two hours. Some thought once a week was perfect timing while others wished we had met two or three times a week. One participant suggested that an online discussion board would have been a helpful addition so participants could discuss the literature and their class discoveries between sessions. Students confided that they often felt the desire to connect to the group between sessions and thought this opportunity would cut the time needed for the literature discussion during class, leaving extra time for more exercises. An online discussion board would

have promoted more opportunities for engagement and will be incorporated into future courses when appropriate. When the curriculum for this study was first created, medical residents were the target audience. Residents' time is extremely limited, and the structure of the course was selected to meet these pressing time constraints. One fortuitous benefit of the subject switch was the greater amount of time the learners were able to commit to the project, not only in class, but time they voluntarily put into processing and reflecting on the material between sessions. This space undoubtedly increased the learning outcomes.

Experiences with Medical Humanities Practices

Outside the defined research questions, one of my main curiosities was how the mixed humanities practices would work together to shape learning outcomes. My field of expertise is performative arts. Practices of mindfulness meditation, poetry, and narrative medicine were introduced to me throughout my educational journey at Drew University. I came to find value in the latter practices and envisioned how they could work together to provide a more holistic learning environment. I hypothesized that looking at the themes of attunement, compassion, and adaptability through hands-on performative play and more introspective activities such as meditation and journaling would not only offer a variety of practices to meet multiple learning styles and personal preferences but would also encourage the learners to relate to the themes introspectively and externally. The following passages are quotes from learners' journals and post interviews. Quotes express participants' experiences with each of the practices, as well as the realizations they came to during the process.

Improv

The mainstream teaching model health profession students are most acquainted with is to learn concepts from a lecture, practice, study, and then show what one has learned through demonstration and evaluation. Thus, the experiential process of applied improvisation is inherently vulnerable because learners are asked to try the practice first, then synthesize what they have learned in debrief. The possibilities of learning outcomes are endless, and there is no right or wrong answer. Asking students to attempt something new, without any preparation, can be challenging for any student, particularly those in the healthcare arena, who have had to work very hard to repeatedly prove their aptitude and understanding to get where they are. These students rely on detailed instructions, outlined guidelines, and clearly defined expectations to ensure their success. Even after instructions are provided for an improv exercise, there is still a lot of freedom for exploration and discovery. Learners must choose to step into a vulnerable space with each exercise, knowing it will be a unique experience. There is no "practice makes perfect." When discussing safety and transparency, some participants shared that having more detailed explanations of what the improv sessions would be like would have been helpful. I am curious if further explanation of the exercises would have made the learners feel more secure or if the explanations would have provoked more anxiety. Many participants confided that they felt nervous about the exercises until they were demonstrated in class, amongst the peers in whom they had built sufficient trust. If the exercises had been described in advance, outside the safe intimate space of the classroom, a concern would be that some learners would have been dissuaded from participating due to anticipation that the practices would push them too far out of their comfort zones.

Apart from two of the students who had played some improv games during high school drama classes, the participants had no experience and minimal knowledge of theatrical improvisation prior to the study. Only one had previously heard of applied improvisation. The student had participated in one two-hour med improv workshop the previous year. Most noted that they didn't know what to expect from this portion of the study. One learner stated, "I thought [improv] was just doing random things…. I thought it was just for play. I didn't realize there was an actual point to it." The connotation that improv must be funny evoked apprehension in some students. "Initially, I was really nervous. I am not exactly known for my humor so I thought I wouldn't be too good at it." Others were more anxious about the prospect of having to act with spontaneity. "I feel like I have to really think about what I'm going to say." While some could not envision ways in which improv exercises could be relevant, others speculated how improv acting could be used. "I thought it was going to be role-playing scenarios in the hospital." These initial assumptions are not uncommon. Healthcare is a serious field. There is rarely an appropriate opportunity to be spontaneous and silly. It is not surprising that people have difficulty connecting improv to medicine. It is imperative to ask participants to reserve judgment until they have experienced a workshop. Afterward, they can determine whether they see benefit in the practice. As revealed through their comments, the participants all came to find personal value in improv. It is also very common for participants to be reluctant to attempt improv for fear that they would not be entertaining. To mitigate this concern, it was stated in the introduction that med improv is not performative improv. Humorous situations may occur organically, but humor is not an objective. The expectation that the performative component of the study would be clinical role play was a logical assumption. The University of South Florida (USF) has a

robust Standardized Patient Program that provides medical students weekly clinical role-play scenarios and is a well-known component of the USF Health curricula.

After participating in the study, the students' descriptions of how it felt to engage in improv exercises were not unlike those I have heard many theatrical artists articulate about their craft. There are clear juxtapositions in the emotions experienced during an exercise. Many of the exercises were described simultaneously as being the most challenging, the scariest, and the most fun part of the workshops. Participants felt both vulnerable and safe; scared and free; silly and thoughtful. Although they shared that they continued to become more comfortable throughout the study, some expressed that the introductions to some exercises would make them apprehensive.

> The one where we had different genres…I was kind of scared. I didn't know what kind of genre I was going to have, and I didn't know how I was going to lead off the story. The trust that each experience would turn out to be fun and would also spark an engaging conversation about direct applications seemed to be what encouraged the participants to keep going.

Each participant shared valuable insights on how the improvisation exercises impacted their learning experience. Some noted specific exercises that were most beneficial while others had more general takeaways. Improv exercises allow participants to actively explore learning objectives, providing them visceral learning opportunities for a more complex understanding of course topics. "Improv was most valuable in terms of understanding the topics. After doing the improv and speaking about it, I thought, 'oh my gosh! That makes so much sense.'" One comment reminded me of responses Hoffman et al. (2008) received following their med improv study, which is reviewed in Chapter Two. Their participants noted that storytelling exercises help with active listening and appreciating another's train of thought. A participant in this study shared that:

> The improv exercises were essential to not only building the community, but so we can understand each other better. You must keep an open mind and be ready to conform to those around you; take into account other people's perspective.

Another participant made a connection regarding the way improv relates to medicine similarly to the way American culture uses humor to process difficult topics in other ways. "We can enjoy comedians that talk about really heavy hitting subject matters through comedy. You can do the same with medical improv." This is a poignant observation that can be drawn upon when presenting med improv to a skeptical audience in the future.

Some shared personal realizations with respect to the impact of body language and tone of voice on rapport and team building. One stated:

> I made intriguing discoveries about my emotional expression. …I found myself struggling to convey [emotions] through body language. I observed how [my partner's] positive body language encouraged me to open up and respond more actively to her questions… She reassured me and sparked a desire to build a deeper connection with her.

Another reflected:

> I didn't realize how words could affect people, and your tone is really important. You need to be vigilant about the way you speak to people, especially in the healthcare field, because you could make an impression on them that could last the rest of their lives.

The personal realizations these participants revealed demonstrate that experiential practices such as improvisation exercises can enhance one's self-awareness. Another example was provided by a student who shared a discovery concerning how they can be a better teammate. "Anticipating outcomes solely for my own gain can be detrimental to the team's dynamics, and I've learned the value of trusting others and embracing their contributions to the common goal." Medical improv provides learners a unique ability to solely focus on interpersonal communication skills such as body language, tone of voice, and active listening through experiential play. Without the added

tasks embedded in a clinical scenario, important discoveries such as those demonstrated above can be actualized.

Mindfulness

Mindfulness is "the basic human ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us" (Mindful Staff, 2020). Prior to the study, only two participants had a previous relationship with mindfulness, both through meditation practice. One ends their weekly yoga practice with a five-minute silent meditation. The other has a life-long, cultural relationship with meditation. As a child, this student took part in a yoga class every Sunday and participated in five-minute meditations during classes as part of their religious affiliation. This participant shared that while they no longer engage in personal practice, every time they are told to meditate, they really enjoy the experience in the moment, and think that it is something they would like to incorporate in their life but have yet to achieve any consistency of practice. One participant reflected that though they had not meditated before, they considered their relationship with prayer to feel much like meditation, as prayer helps them to feel more "balanced and come to a place of mindfulness." The rest of the participants had minimal prior experience with meditation, and held varying ideas of its purpose, for example, how meditation can be practiced and willingness to try it. Some students had a negative connotation of meditation, or a narrow view of who could benefit from it. One said, "Before, I had stigmatized meditation and considered the practice of meditation to be some sort of anxiety coping mechanism." Others considered meditation would cause discomfort.

> If I had to rate [my comfort with mindfulness prior to the course] on a scale from one to ten, I'd probably give it like a three or four because honestly, I have anxiety so I cannot be alone with my thoughts for a very long time.

Anxiety was a commonly addressed concern by participants; one which they feared would hinder their success. Conversely, as will be discussed later in this chapter, meditation became a coping mechanism for some of the participants who experience symptoms of anxiety.

The participants all shared insightful takeaways from their experiences with the various mindfulness practices incorporated into the study, particularly how the study broadened their understanding of the ways in which mindfulness can be beneficial. One comment resonated with Jackson-Koku and Grime's (2019) research regarding meditation as a tool to reduce the risk of burnout. This participant shared in their post-interview that "Meditation is for everyone and even beyond being a healthcare professional, there are benefits of utilizing meditation to manage a stressful schedule." Another comment, "I love that idea of releasing all the different identities that you hold and just coming back to your authentic core," reminded me of Burgess et al.'s (2017) discussion concerning how mindfulness practice increases one's aptitude for individuation, the ability to see themselves separately from the identities of others.

Throughout the sessions, the participants practiced three different guided meditations. The first was a ten-minute guided meditation by Jon Kabat-Zinn which focused on remaining in the present moment; participants concentrated on their bodies and the space around them, releasing ruminating thoughts as they appeared in the mind. The second was a loving-kindness meditation, and the third was a visualization exercise that addressed equanimity. The learners were eager to share with one another the ways in which each meditation impacted them differently. All but one participant found it easier to focus during the loving-kindness and equanimity meditations than during the first guided meditation with Jon Kabat-Zinn. They agreed that the loving-kindness and equanimity meditations were more engaging because they provided direct instructions regarding what to visualize. Interestingly, the participant who

preferred the guided meditation with Jon Kabat-Zinn was the one with a rich meditation background. They disclosed:

> ...challenges arose for me while doing the empathy and equanimity guided meditations since I have only been acquainted with meditation in the sense of focusing on my breathing patterns. The first session was the style of meditation that I'm used to. The next two were actually pretty difficult for me… I found myself drifting off more.

Although most students struggled with Kabat-Zinn's meditation, a few participants shared specific positive experiences with this practice. One particularly interesting outcome came from the learner that had shared their fear that mindfulness practice would cause them anxiety. They told me in their post interview that:

> The guided meditation turned out to change my entire way of thinking. I had originally thought that it would be impossible to maintain my thoughts and practice cognition of my surroundings when finding myself in a quiet location. Guided meditation … was interactive and managed to steer my thoughts, which allowed me to picture my thoughts rather than jumble them all together in my mind.

This learner experienced a shift in their relationship with their thoughts after one practice experience. Jon Kabat-Zinn's Mindfulness Based Stress Reduction Program (MBSR) addresses self-confidence, self-esteem, acceptance, and understanding one's relationship to thought. It is structured to be an intensive eight-week program (Miller, 2013). It is important to note that this student experienced a growth outcome after only one, ten-minute session. Longitudinal studies and extensive programs are not always feasible. Though educators cannot expect transformative outcomes after a one-day workshop, instances such as this participant's experience with meditation demonstrate that important seeds of knowledge and awareness can be planted to promote future learning and growth.

The loving-kindness meditation resonated most with the participants overall. Some shared that channeling the love and admiration for those closest to them made them feel happier

and more content. Though many articulated that the latter part of the meditation, when participants are asked to send altruistic and kind thoughts on to those in their lives' they find challenging, was more difficult, they also shared that the ending phase was helpful to them personally. One noted how the practice helped them better understand their personal relationships with others. "[Loving-kindness meditation] helped me to understand how I was feeling toward each person I was thinking about. I noticed that there were some unresolved wounds that I thought I had resolved." Another shared how the last phase was a healing experience for them. "[Loving-kindness is] a very powerful tool. [It is] the perfect exercise to rid yourself of hateful thoughts towards an individual. It was cathartic to let go of some anger because the only one who was suffering was myself." These shared reactions mirrored Austin's (2013) notion that once a negative emotion is identified, it can be released and tends to fade.

The students' reactions to the concept and practice of equanimity were mixed. One participant acknowledged experiencing a difficult time reconciling equanimity as a positive trait.

> It can be difficult to practice equanimity since it revolves around maintaining a neutral sense of self. Although I agree with this being best in professional and clinical settings, I do think that being human means feeling every emotion to its fullest. I struggled with the views of the article and found myself objecting to the practice.

For two participants, the equanimity practice brought about self-discoveries and peaceful resolutions. One shared:

> I felt truly calm. When I imagined my anger in a form, it was this little red ball that was floating, and it looked so funny to me. Being able to visualize it and then say, 'I can choose to be away from this. I can choose my relationship with my anger.' That's something you never truly realize until you're put into these situations.

The other stated:

> The moment of realization arrived when we were asked whether we wanted to remain within the circle with the problem or leave. Choosing to confront the issue head-on, I made the decision to release myself from its grip. I understood that this

> wasn't a problem I was meant to solve or carry on my own; rather, it was holding me back and adding unnecessary weight to my life. This act of liberating myself from the grasp of the problem allowed me to gain perspective and restore my inner peace.

These comments help us understand that mindfulness practice can help individuals put space between their thoughts, emotions, and reactions, allowing the individual the ability to choose how to move forward.

Overall, the mindfulness practices seemed to impact the participants most in promoting personal wellness. Many participants provided specific examples of how meditation helped them throughout the study, and many shared a desire to maintain a personal meditation practice beyond the study. One shared in a journal reflection a specific incident when meditation helped them through a stressful situation:

> These sessions gave me valuable tools to navigate life. Yesterday, I had a doctor's appointment, and while waiting in the exam room, I got really anxious and started to sweat. I quickly tried three minutes of mindfulness and focused on breathing. After those three minutes, I felt more relieved and comfortable while I waited for the doctor in the exam room.

Another shared how meditation practice was enhancing their ability to stay attuned in their day-to-day life:

> Meditation emerged as the most transformative practice. Integrating meditation into my daily routine has been a revelation, allowing me to embrace the present moment fully and heighten my awareness of the world around me. Meditation has also proven instrumental in clearing my mind and gaining a deeper understanding of my emotions and their projections into the world.

While the improv exercises led to discoveries about the way participants perceive the world around them, the meditations helped them discover internal needs and struggles, as well as tools for healing. Participants' intentions to make meditation part of their regular routine was another contrast from the improv exercises, for which the participants found value and enjoyment, but did not reflect a desire to seek out on their own.

Reflective Writing

The study incorporated various writing assignments including reflective journaling, close reading reflections, and poetry. Each of the practices received mixed reviews. Previous engagement with poetry and/or journaling appeared to have an influence on the participants' interest and confidence in the writing assignments. There were, however, some participants who started the course with low writing confidence, but found they enjoyed the journaling process.

The group's experience with reflective journaling varied greatly. Some had never tried journaling while others had maintained a daily practice for years. Some shared that they lean on journaling when they need to sort their emotions. "I always like to journal to express my emotions in order to understand what I feel."

As well as experience, the group's relationship with journaling also varied. While some found comfort and clarity in journaling, others noted adverse opinions of reflective writing prior to the study. Two students did not feel that the value of their past journaling was worth the effort. "I wasn't very consistent, but I would journal from time to time. I would say it is kind of tedious." Those that have used journaling as a wellness tool in the past found the journaling assignments to come easily and were quick to articulate positive attributes to their practice.

> This activity changed my life because it made me realize how much I missed journaling. It helps clear the mind and helps one become empowered and more confident. As a result, now I practice journaling daily. It helps keep me motivated and it helps me achieve equanimity.

Even some who had confided that they were not comfortable writing in the past had positive outcomes with the journaling assignments. "I found it helpful because sometimes my thoughts do get jumbled. Writing it out helped sort out my thoughts."

The most common takeaway from the journaling assignment was that writing helped the learners process what they had experienced and articulate what they learned. "[Through] the

practice of journaling… I could consolidate my learnings and chart the progression of my insights. The process… reinforced the concepts discussed [and] facilitated a deeper understanding of their practical implications." One participant shared how the journaling helped them reflect on themself. "The journaling process helped me to delve deeper, because I wasn't just re-stating everything we said, I was also reflecting on myself." Another stated that journaling reinforced the skills they learned and how to apply the skills in their life. "I enjoy journaling because it really helps me to look back on what we did and really acquire those tools and be reminded to be more present in my daily life." The above comments affirmed the reasoning for incorporating journaling into the course. The hope was that the written reflections would encourage the students to take the time between sessions to process what they had absorbed thus far and synthesize stronger connections to the material.

The participants were given one close reading assignment, to complete outside of class. Close reading is a literary analysis practice in which a passage is read multiple times, with a focus on the specific details of the text to discern a deeper meaning (BCCC, 2019). Participants were sent two short passages and were asked to read each one a few times, taking time to reflect on the meaning or feelings invoked. Close reading was a new practice for all but one student. Every participant who mentioned this assignment in their written reflections or interview expressed having had a positive experience. "I'm definitely going to use this later because it gives a new perspective and makes you notice certain details and understand the deeper meaning of it." Learners reflected on how despite being short, they were able to find something new to ponder each time they revisited the text.

> Those stories were really short, but I thought they were really impactful. I was able to find something each time and ponder about it for days until our next session. And then, talking about it with the whole group further brought more insight.

The learners' reflections echoed what Rudnytsky & Charon (2008) suggest about close reading, which is that it helps to develop a capacity for attention and can train providers to silently absorb the content presented and examine perspectives through a new lens.

The students were also assigned one poetry exercise. They were asked to write a letter to someone and then turn the letter into a poem. There were no guidelines as to whom the letter should be written. It could be to communicate unresolved feelings or to share good news. It could be to a patient they saw, a stranger they encountered on the street, or a loved one. This assignment garnered the most mixed reviews of all the practices in which the learners engaged. The students' reactions directly mirrored what they shared about their past experiences with poetry. Those who enjoy reading and writing poetry enjoyed the exercise. Those who have less confidence with creative writing struggled with the process. The pressure they put on themselves to write a "good poem" kept some from being able to enjoy the process. However, many who indicated that it was a difficult assignment, still discovered something about themselves in the process.

> Our mindset is powerful and contributes to our capabilities of accomplishing activities. Frequently, I find myself doubting my ability to write and that contributed to the awkwardness I felt while writing poetry. I found writing poetry to be the most difficult experience for me and I believe part of that may be my inability to feel confident in my poetry writing skills.

As discussed in Chapter Two, crafting poetry requires the author to slow down a focus on the intention and perspective they want to portray in their work. During the process, the author may become aware of emotions that had yet to be acknowledged, or a new way of looking at an issue may arise (Allan, 2022). This assignment was incorporated into the study to give participants the opportunity to experience this type of exploration. One shared that the exercise helped to articulate their emotions. "I really enjoyed writing a letter and then writing a poem about your

feelings because sometimes you just feel and don't stop to understand why you're feeling that." Another reflected on how transforming a letter to a poem helped them clarify their relationship and intentions. "I was able to take [my] letter and think about, 'what is my relationship to this person? Why did I write this letter? What did I want to communicate?" These reflections suggested that the assignment met the intended objective.

Literature

Prior to each session, the learners were sent two or three readings to prepare. The readings were selected to provide an overview of each session's topic. In preparation for Session One, the readings included an article by family medicine physician Belinda Fu, which provided the incoming participants an overview of how theatrical improv is utilized for teaching communication in medical education. Also assigned was an essay entitled "An Ethic of Care" by women's studies and political science professor, Joan Tronto. A third, optional article was offered, entitled "The Epistemologies of Silence." The readings for session two focused on compassion. One was written from the neurological perspective of how resonating compassion can fire positive neurons in the brain. The other was written from a sociological perspective; it is an essay about a doctor who improved his relationships and health outcomes with his patients after looking at his cases with a more compassionate lens. The readings for the final session included two academic articles; one is entitled, "Relating Equanimity to Mindfulness," and the other is a response regarding consideration of the doctor-patient relationship as a Gadamerian dialogue. The students overall found the readings relevant and relatable. "I find the readings to be interesting and functional for all aspects of life. I understand how each reading was applicable to personal and work life, even outside the realm of working in medicine." The participants

demonstrated through class discussions that they had taken time between sessions to absorb each reading and reflect on its meaning to them.

At the beginning of each class, the readings were discussed as a group while stretching on yoga mats. Learners would choose a stretch to demonstrate while they spoke. Everyone would mirror their stretch as a display of undivided attention. The participants all actively engaged in the discussions and stretches each week, and many of them disclosed that these conversations were one of the main highlights of the study. One disclosed that the discussions helped them to understand concepts of the literature more fully. “I liked that we talked about [the readings] in the beginning with everybody. I felt like I didn't really understand the literature sometimes and talking about it really helped.” Another expressed that the discussions helped them perceive the texts in new ways.

> Our group exercise on the yoga mats offered an eye-opening revelation – each individual perceives the world through their unique lens, offering a perspective that is both distinct and complementary to others. It was through this sharing of diverse experiences that I gained a deeper understanding of others and, ultimately, myself.

The literature discussions generally extended past the allotted time in the schedule due to the individual’s open curiosity, willingness to share opposing viewpoints, and gracious acceptance of each other's perspective.

Many of the students journaled about specific readings that resonated with them. One mentioned “Relating Equanimity to Mindfulness,” which discussed the concept of equanimity.

> Among my favorites was a study on equanimity, a concept that had been previously unfamiliar to me. Through exploration and discussions with fellow participants, I came to understand the value of equanimity in maintaining composure and emotional balance, both in my personal life and future patient interactions.

The majority of the students were impacted most by the readings for Session Two, which focused on compassion.

> "The Fortunate Physician: Learning from our Patients" by Fred L. Griffin states that primary care physicians are also afforded moments in the physician-patient relationship when they can achieve a partnering of self-reflection and self-inquiry with engaged, attuned clinical work. However, medical training has devalued the physician's subjective experience with their patients and fails to encourage a mutual appreciation for the physician-patient relationship. By using words of affirmation, we can further grow the physician-patient relationship that benefits both.

Another popular reading was the Session One assigned essay, "An Ethic of Care" (Tronto, 1998).

> 'An Ethic of Care' emphasized the peril of viewing the elderly's care needs in isolation, separate from the broader context of human interconnectedness. It dawned on me that while [my grandmother] has accepted her physical condition, the position of vulnerability she finds herself in proves challenging. She strives to maintain her daily routines, remaining as productive as before and adamantly refuses to rely on anyone or display any signs of vulnerability, emotionally or otherwise.

As demonstrated in the presented quotes from the participants' reflections, they routinely applied the readings to their own lives and perceptions of the world to find deeper meaning.

One article, "Epistemologies of Silence" (Dénommé-Welch and Rowsell, 2017) was assigned as an optional reading for Session One because it is quite lengthy and academically advanced but provides concrete examples of the ways in which the use of silence in human interaction can be both helpful and harmful. It was hoped that the learners would read through the article to get a sense of the content, to be set up for a discussion concerning how silence relates to attunement. It was not expected that the students would put effort and time into interpreting the text beyond their base understanding. One student was not satisfied with the article being optional.

> I would make the optional reading not optional. I did want to discuss that one and not a lot of people read it. I think obviously it was a harder read but I think that's necessary for these kinds of takeaways and values.

Others affirmed the intuition that the text would be too challenging for some learners. “There was one reading in particular that was a bit hard to read. I got to a point where I lost what even the point of it was.” The difficult content of this article made the learning outcome unattainable for some, which impacted all the students, including those that absorbed the meaning. This selection will not be incorporated in future curricula with undergraduate learners but will be considered for post-graduate audiences.

When crafting this study, one inquiry was to see how the practices of improv, mindfulness, and reflective journaling would come together in a curriculum designed to teach self-awareness and interpersonal communication. The responses received from the participants demonstrated that the practices did support each other in enhancing the understanding of each topic, while individually bringing forward a unique aspect of the outlined objectives. When discussing the improv exercises, the learners mostly spoke of how they became aware of new perspectives, and how they relate to others. They began to acknowledge the ways in which the outside world impacted them and vice versa. In their reflections concerning the mindfulness practices, they articulated a new awareness of their personal needs, emotions, and ways in which they would like to grow. Participants discovered stressors they had not addressed before, as well as tools for personal wellness and healing. The reflective journaling helped learners reframe what they experienced in class and helped to solidify concepts by exposing new connections to the themes we discussed, thus providing a broader perspective of understanding. When the participants put their thoughts into words, they discovered nuances or perspectives they hadn’t processed in class. Though the sample size is exceedingly small, the data suggests that incorporating a mix of experiential strategies is an effective way to foster increased attunement, compassion, and adaptability in pre-health scholars.

Insights on Course Themes

The course created for this pilot study consisted of three sessions. Each session focused on a specific theme, starting with an exploration of attunement, then compassion, and ending with adaptability. The sessions were ordered and crafted with the intention that each exercise would build on the last. The hope was that learners would not look at each concept individually, but rather connect the dots along the way. The objective of the first session, focused on attunement, was to bring a heightened awareness to the learners about how they perceive and interact with the world around them. Once they gained awareness of diverse perspectives, they were ready to address the theme of compassion. When one comprehends that everyone perceives the world differently, it is easier to find compassion for those who are different. With heightened awareness and compassion added to their toolboxes, learners would be better able to address the goals of Session Three; the students could begin to consider ways in which they can adapt to better meet the needs of others and alter negative patterns in their personal lives. While reviewing the responses the participants shared relating to the course themes, it was apparent that each previous concept was considered as the learners progressed through the sessions. For example, many mentioned that being more aware of others' reactions helped them to feel more compassionate. The following is an examination of the way participants engaged with the three themes, as well as takeaways they discovered throughout the process.

At the beginning of the first session, it was imperative to devote time to create a safe learning environment. After reviewing the consent form and study objectives, an introduction was given to inform the participants that the course might involve sensitive topics, exercises, and group discussions. Guidelines and expectations were established to ensure the space remained safe, empowering, and respectful. The session rules were similar to those employed in the

University of Utah, as discussed in Chapter Two (Chow et al., 2019). The participants were asked to repeat the phrases, “I don’t have to be perfect” and “Assume good intent.” These tenets invite learners to try new things without fear of failing and remind students to be curious and compassionate with their peers. These tenets assure learners that if something is said or done that appears insensitive, it is likely that offense was not intended. If an issue is explored with sensitivity, it can be resolved in a way that offers a positive learning experience for all involved. A few participants shared reflections that demonstrated that ensuring a safe space promoted community and personal engagement.

> I got to connect with new people and was comfortable with it since we were put in an environment where all of us were made to do different tasks that put us out of our comfort zone together. This created a sense of vulnerability that allowed each of us to open up and connect. I was able to involve myself with each activity and engage more openly.

Throughout the study, statements of affirmation were made during debrief discussions to acknowledge the students’ investment in supporting each other which continued to foster an environment that encouraged creative and cognitive exploration.

Attunement

The first activity of each session involved everyone sitting in a circle on yoga mats, sharing a group stretch, and discussing the week’s assigned literature. Learners were asked to mirror the speaker’s stretch until the focus switched to another speaker. The intention of this practice was to incorporate attunement by means of active listening. I first discovered this approach through Katie Watson’s Medical Improv Train-the-Trainer course at Northwestern University in 2016. Many participants responded with positive reactions to this exercise. One shared the impact of mirroring each other’s stretches. “We went the extra mile by repeating each other’s exercises and stretches to show that we are paying full attention and listening to each

other." Others reflected on how the discussions deepened their understanding of the text and enhanced their interest in the topics. "Knowing [my peers'] thoughts about different things made me open up and think, 'Oh wow, I didn't think about that.' It made me more interested in learning more about different things." The members of the cohort were all engaged in each group discussion and enjoyed sharing different perspectives. At times, discussions were halted before the conversation ended naturally, to reserve time for the exercises. The time constraint we experienced prompted consideration of adding a message board through which the students could discuss the readings between sessions or continue discussions after class for future courses.

Within the theme of attunement, the topics of present-moment awareness, perceiving ourselves and others objectively (without judgment), and utilizing silence as a gift were discussed. The intention was to demonstrate each skill individually through the various exercises, and to express that together, they all contribute to becoming more attuned to oneself and to the external world. Responses demonstrated that the three stated objectives for the attunement session were achieved through improv exercises. The first objective, to utilize active listening, is evidenced in the following quotes. One shared how active listening led to new discoveries. "I think the interactive sessions were the most valuable for me because when I'm thinking to myself, I might not always discover everything but when I'm talking to others, I can hear their perspective as well." Another remarked on how actively listening and incorporating other's insights leads to satisfaction and success.

> What struck me was the realization that the success of the exercise didn't solely rely on my individual will, but on being fully present and attentive to my partners. Witnessing how interconnected we all were in achieving our mission filled me with pride, as I knew we were working together for the success of the team as a whole.

This learner practiced non-judgment through collaboration. "I really enjoyed trying to think as a group; to make the other look good and think about what they were thinking so I can help them

and build together." The following learner spoke directly to the impact of silence. "I learned the power of silence, realizing that it can be as revealing as spoken words – a profound lesson in the art of communication and empathy." As demonstrated through the student's quotes, a variety of improv exercises were utilized to isolate specific objectives. Some required participants to focus on tone of voice or body language, while others challenged the learners to attune to specific contributions their partners were adding to a collective story, to effectively co-create a cohesive thought.

The improv exercise called *Empathy Walks* appeared to have the greatest impact on bringing awareness with respect to how quickly assumptions and judgments regarding others are made. During this exercise, learners walk around the room and build physical personas based on prompts about who they are, such as "You are a fifty-year-old banker." The individual decides how they walk and how they envision themselves in that role. As the story progresses, the individual learns more attributes and actions of the person they are portraying, and that information may change their perspective of the character.

The objective of this exercise is like that of the attunement exercise discussed in Chapter Two, which Hofmeister & Soprych (2017) used to inform residents about how to care for previously incarcerated patients. These exercises exposed a tendency to create people's stories and motivations based on very little factual evidence. For example, at the initial instruction to walk like a fifty-year-old banker who was recently promoted as supervisor of a national chain of banks, the participants immediately straightened their posture and walked swiftly, with purpose, a wide gait and chin up, demonstrating pride and confidence.

As the scenario progressed, it was revealed that the banker had been embezzling money and had been found out by the federal government. Suddenly, the pace halted in the room. Chins

dropped, shoulders curled, and the students started glancing side to side instead of straight ahead. In discussion after the exercise, some students said they began the scenario feeling proud of themselves for attaining such a distinguished position. Then, they felt shocked when they learned about the embezzlement, and their perspective of the person they were portraying completely changed. They were no longer reputable members of society but criminals. Some had a hard time staying in character after this progression because they could not process the motivations of a person that would do something they see as fundamentally wrong. They could not empathize.

I asked the participants to describe how they pictured themselves in this character. Did they look as they do in real life, only at age fifty-five, or did they create a completely different person in their mind? In a profound demonstration of the gender and ethnic roles we assign to certain positions in American society, six of the eight women who participated stated that they saw themselves as men, mostly overweight. Both male participants also envisioned themselves as male. Further, only two participants pictured the banker as their ethnicity. Everyone else pictured their banker to be white, despite only two participants out of ten classifying themselves as white. The students considered themselves to be progressive in the belief that any American can choose their profession no matter their gender or ethnic identities, so they were struck to realize that out of a very ethnically diverse and heavily female population of ten individuals, eight envisioned their banker to be white and eight pictured their banker as male, with the overwhelming majority envisioning overweight, white males.

The following are some quoted examples of the other reactions received by the learners after engaging in *Empathy Walks*. This quote addresses the challenge of releasing fixed mindsets. “When playing out the character it was challenging because sometimes, we have a specific mindset and having to change it suddenly can be hard.” Another participant commented on the

difficulty of envisioning oneself in a position caused by something they see as wrongdoing. “It made it a little difficult to put myself in other shoes in that aspect…because in my own mind, I would never do that. That would not be me. It helped me open my mind a little bit more.” The discoveries and thoughtful discussion following this exercise challenged the participants to question their initial judgments and investigate further with curious intention to better understand others and their situation.

The intention of reserving judgment became more apparent as the students applied their newfound awareness to following assignments. When asked to read a passage multiple times and reflect on new insights or meanings that arise in preparation for Session Two, one student shared this interpretation.

> *A cup of tea* … brought in a new point of view regarding our own opinions and speculations. It symbolizes that we need to put aside our own judgment at times and listen to what the other person says. It could also mean we need to empty our own emotions to focus and feel the other person’s emotions. Otherwise, we would not be able to connect with the ‘other.’

The students’ journal submissions from week to week showed that they were developing a commitment to trying to be more observant as they progressed through the session themes.

Many journal entries articulated that practicing present-moment awareness began to change the way participants engaged in their day-to-day lives. Some noticed a shift in how they interacted with others. “My mind and body are being completely transformed. In my work life, I see a difference in how I approach someone. I also pay more attention to my body language, my expressions, and the way I speak.” Others noted feeling more mindful of the way they experienced each moment. “I feel more grounded, centered, and present in my everyday life. I am able to fully savor and enjoy every moment. It has changed so much of my daily habits for the better.” One challenged themself to try a new practice of present awareness. “I turned off the

music and drove in silence. It was such a weird abnormal experience. It felt really good." This practice was not suggested in class. The learner decided of their own accord that this would be useful to try. Others expressed that being more attuned to the needs of others, and offering silence as a gift, impacted their relationships outside of class.

> I have practiced listening more in my own personal life and supporting the people I love versus trying to explain that I understand and offer advice. I have discovered that most times, individuals know what they could be doing to make their situations better- they are not seeking advice, they simply want someone to listen and comfort them.

It was affirming to witness the many participants who voiced the ways in which they were continuing to apply the strategies from class in their personal lives. This adherence can promote more transformative outcomes.

Many of the participants wrote specifically about discoveries they made via the exercises that focused on attuning to body language. One remarked on how every person expresses pain and emotion differently. "Patients will feel and express pain differently, and as future healthcare professionals, it takes meticulous planning and collaboration to assess a patient's pain as well as find the best plan of action for care." Another observed how nuanced cues provided by a patient through body language, if noticed, could greatly impact the patient's care.

> It's easy to overlook the small details on how someone is presenting themselves, especially if you are not being observant. These small details, however, can be crucial in understanding how someone actually feels, rather than basing it strictly off of what they say.

These insights align with those of the Schäfer study (2016) in which findings displayed how, overall, female patients' pain was rated lower than male patients, and implied that females more frequently exaggerated their level of pain. These findings suggest that certain demographic attributes may impact the ways that individuals are assessed, making the students' insights regarding the acknowledgement that all individuals display pain differently even more vital.

Compassion

One of the readings the participants were assigned in preparation for the session which focused on the concept of compassion was "Mind of the meditator" (Ricard et al., 2014). In the article, Ricard et al. (2014) explains a difference between empathy and compassion and reviews neurological studies which demonstrate that individuals who practice compassion meditation showed activity in the areas of the brain associated with positive emotion, while those who practiced empathy meditation showed more activity in areas of the brain associated with negative emotion and fatigue. Many participants were intrigued by this article and by the concept that empathy and compassion are different practices. A few wrote about their new understanding of the difference between empathy and compassion, and how the distinction impacted the ways in which they envision themselves interacting with patients.

> We need to have compassion for every patient. We should not be dragged down with them when they are having a hard time. The way I think of it, we reach a hand from above and pull them to the middle of the space between us. Being empathic means knowing how and why a person is feeling the way they do. And while that might be true in some cases, it is not always the case. Compassion is acknowledging that a patient is in distress, and doing your best to help them in whatever capacity might be necessary.

One participant who works in a pediatric urgent care center stated that the article helped them better distinguish how to interact with patients depending on each unique situation.

> I have changed the wording that I use with my patients, parents, and coworkers. Now that I know the distinction between empathy and compassion, I am more mindful of the words I use to express sympathy. If it is something that I have also experienced, I am able to be empathic, which often brings the children relief to know someone else has gone through something. In times that I cannot relate, I am compassionate. I acknowledge that their pain is valid and real and go about the visit keeping that in mind. This also goes for my personal life. If I am talking to someone who is pregnant, I know now not to say, 'I know it is so hard' because I do not know.

The discussion of the distinction between empathy and compassion also sparked conversation about self-care. This topic was not a previously outlined objective for this study but is a common application of meditation and medical improvisation. Self-care was a recurring and important theme to the learners in the sessions, therefore was taken into serious consideration and resolutions to their inquiries were sought. One example of how the topic of empathy invited discussion about self-care is outlined in the following excerpt from a participant's journal.

> I often find myself emotionally affected by the difficulties and sufferings of those around me, which can evoke feelings of sadness, helplessness, and at times anxiety. Finding the right balance between empathy and professional judgment can be a delicate equilibrium to maintain. To address these potential burdens, it is essential for me to practice self-care and establish healthy boundaries in my relationships with others. Recognizing these challenges will enable me to strengthen my resilience and improve the quality of care I provide, both personally and professionally.

This quote makes an important point regarding compassion and care that warrants reiteration: If one is not compassionate with themself, and not meeting their personal needs, they are unable to fully be present to meet the needs of others.

The discussion of self-compassion became a focus during the debrief of some improv exercises. The learners agreed that it can be much easier to forgive others than to forgive oneself. In the first exercise of the study, students were directed to yell "ta-da" every time they made a mistake that disrupted their team's pattern. In return, the team cheered for them, reset, and re-started the pattern. Afterward, the teams reflected that it was easy to shake off the mistakes of others, and that it felt great to cheer for them in support. Conversely, they reported that it was more challenging to let go when it was their error that caused the pattern to break.

> [The exercise] made me see how sometimes we are way more demanding of ourselves when we make mistakes than with other people. This game puts into perspective that forgiveness is not always about the people around us, but it is important to learn how to forgive yourself and keep going without overthinking those setbacks.

This realization is so vital in the medical context because the way care providers handle their missteps can have a great impact upon the relationships with, and the health outcomes of, their patients. When care providers hold themselves accountable, with the acknowledgement that they are human and therefore not infallible, the anxiety built by most errors can be released, and the provider can place their full focus on remedying the mistake. Further, their accountability is likely to build trust and respect with their patients.

This opening exercise, called *Zip-Zap-Zop*, also showed the students how quickly rapport and trust can be built through affirmations. Many participants shared that this exercise was a key experience that helped them feel safe, and willing to be vulnerable in the study sessions, because they felt respected and supported by their peers. These comments mirrored those that Cai et al. (2019) shared from the debrief of the opening exercise "Right!" which they used in their med improv workshop with Obstetrics and Gynecology residents. Rapport and trust can be built very quickly when one openly expresses compassion.

There were two defined skill set objectives for the compassion session, one of which was to practice affirming others and their perspectives. One of the ways this was done was through a guided loving-kindness meditation. Mindfulness practice helps practitioners put space between their thoughts and emotions, making it an effective tool for mitigating implicit biases. As discussed in Chapter Two, functional and MRI studies have proven that meditation can minimize negative activations on the brain (Burgess et al., 2016). Stell and Farsides (2016) demonstrate that loving-kindness meditation decreases implicit bias in as little as three minutes. The participants of this Medical Humanities study shared reactions to the loving-kindness meditation that support Stell and Farsides' research. Some expressed an ability to release ill feelings they had harbored for a long time. One came to regard a disagreement from the perspective of an

estranged friend and found forgiveness for the friend. Another participant shared in their weekly journal entry,

> I think I needed to do the [loving-kindness meditation] because ultimately, we hold a lot of anger and like a lot of negative emotions towards people. We're our own people and I have to respect that, even if I may not like the way others do things. I think it's something that even though it's hard to do, it's something that we need to do.

During the debrief of this exercise, most of the students agreed that the practice was easy and heartwarming at the beginning, when they were envisioning those closest to them and wishing them well. Learners then reported that it became more difficult when the guide prompted the learners to send affirmations to people whom they find challenging or have caused them hurt in some way. Some learners even felt resistance at first. However, in the end, most felt a release, which one described as "feeling lighter." These reactions exhibit the efficacy of this practice; it could help one to engage with those who are different from them with curiosity and compassion as opposed to making assumptions and negative judgments.

The second outlined objective of the compassion session was to build connections with "the other." The prospect of considering perspectives that differ from ours and investigating ways to honor their views was infused into all exercises. During the debrief, learners were asked how each exercise could relate to their practice as a future health care provider and were encouraged to synthesize what they could apply to their work and personal lives. Following the session, one participant summarized their takeaway:

> At the heart of compassionate care lies the ability to empathize with others. Through the exploration of diverse texts and introspective exercises, I have honed my ability to step into someone else's shoes and view the world from their perspective. This newfound empathy will serve as a cornerstone of my interactions with patients, enabling me to understand their unique challenges and emotions more deeply. I have come to realize that true healing involves not just treating physical ailments but also addressing the emotional and psychological well-being of patients.

After learning to attune to the needs of patients with a compassionate outlook, the final objective of the study was to explore ways that providers may be able to adapt to meet patients' needs more effectively.

Adaptability

The exercises in the third session, which focused on developing adaptability, invited participants to explore how varying styles of communication can empower or demean. Discussions addressed the choice one has regarding how they approach others. A learner shared, "One of the lessons in the course that I found valuable was meeting the patient or person where they are, to find where their knowledge is on the topic and start from that point." When one is mindful in their engagements, they can more easily adapt, to meet the needs of the other.

An improv exercise performed in Session Three, *One Up, One Down*, required learners to respond to a statement from their partner in four different ways. The complete description of this exercise is provided in Chapter Two. *One Up, One Down* had a profound impact on the learners' understanding of how one's delivery can alter the way their comment is received. This exercise challenges the students to step into a vulnerable space when responding directly to their peers in a way that could be received as offensive. To mitigate apprehension, prior to beginning, the students were reminded that the responses are crafted with the intention of learning through role play and should not be taken personally. In between each round, the learners still felt it necessary to reassure their partners that their responses were not what they actually thought. During the debrief, many shared that they felt uncomfortable expressing themselves in some ways, especially while putting their partner down, but other motivations felt very familiar. Some noted that when they responded to Partner B in a way that lowered their own status, it felt natural to do so. However, when the learners switched roles and they were now on the receiving end of a self-

deprecating comment, they realized the uncomfortable position in which that mode of communication can put the receiver. Their reactions to hearing their partners demean themselves made them aware of how they may make others feel when they default to putting themselves down in conversations. After the workshop, one participant shared this takeaway. “The exercise *One Up, One Down* made me realize that the way in which I respond will direct the conversation in a negative or positive direction. This is challenging because conversations are nuanced and move very quickly.” This exercise, taught to me by Dr. Fu, was derived from the work of Keith Johnstone, a pioneer of theatrical improvisation. In his book *Impro: Improvisation and the theatre*, Johnstone (1979) explains his observations of everyday conversations in which people’s motivations, no matter how slight or nuanced, would establish their status, above or below the other in the conversation. He started to ask his actors to intentionally choose strong or weak ways of expressing themselves in dialogue to assert or lower their status. He states that his actors innately understood what he was asking and were immediately able to adapt their motivation to simulate the desired status outcome. He describes the result as transformative. In the context of applied improvisation, the results are very similar. Humans innately understand the feeling of being submissive or dominant in a social situation and when asked, can usually interpret how to respond to achieve a higher or lower status with very little effort.

One of the subtopics for the third session was Empowerment. The learners engaged in storytelling exercises that required trust and collaboration. To succeed, they needed to practice the skill of active listening to pick up the story where their partner left off and co-create a cohesive story. The participants empowered each other by trying to lead the story in a direction that was clearly defined, incorporating details on which would be easy to elaborate. The students supported each other by affirming what came before, and then incorporating those characters and

plot lines moving forward. Following this exercise, the learners were eager to share how they could relate this experience to patient care. One learner wrote about their take-home points gained from these exercises in their final reflection. “The exercises in our session have helped me realize the importance of letting go and embracing the fluidity of collaboration. By allowing others to contribute in their own way and being open to unforeseen outcomes, I can create an environment of shared responsibility and mutual support, ultimately enhancing our team's cohesiveness and effectiveness. Embracing the principles of trust, collaboration, and flexibility will undoubtedly empower me to provide holistic care to my future patients and engage in meaningful partnerships with colleagues in the medical field.” This comment aligned with the findings that Kasnakoglu and Pak (2019) noted in their physician study in Turkey. This study measured patient satisfaction following scenarios crafted to vary in the levels of positivity expressed by the physician. Results demonstrated the importance of meeting the patient where they are emotionally; patients coming in with a negative outlook perceived the most positive physician encounter to be a negative experience. Kasnakoglu and Pak outlined the importance of a co-creative approach in which both the physician and patient feel empowered to contribute to the conversations to build strong, long-lasting relationships.

The second subtopic for the third session was Equanimity, which is the ability to recognize feelings without letting them impact choices or actions (Anālayo, 2021). Prior to the session, the learners were asked to read “Relating Equanimity to Mindfulness” (Anālayo, 2021) to familiarize themselves with the construct of equanimity and its relationship to mindfulness. Anālayo explains that equanimity refers to having a peaceful attitude. One is not greedy for positive feelings nor upset by negative feelings. When one is mindful, they accept everything as it comes, the good and the bad. In Session Three, the students participated in an equanimity

meditation, which guided them to relate to a problem in a new way to find acceptance and peace. The meditation guide led learners to visualize a problem and then decide how they wanted to engage with it. For example, they could release the problem and walk away, or hold it close. Equanimity, as a concept, was received with mixed reactions. Many participants found the idea helpful in mitigating reactivity and promoting resilience.

> Reflecting on this experience, I recognize that my innate need for control often interferes with my ability to find tranquility. By attempting to manage every aspect of a situation, I inadvertently create inner turmoil. …Learning to release my need for control during this exercise has been both enlightening and liberating.

This student found the peace to which Anālayo was referring, by accepting that they will have negative outcomes that are out of their control. However, one student struggled with the concept and felt that equanimity may be contradictory to human nature.

> I found myself conflicted with some of the views in the article we have read and discussed. It can be difficult to practice equanimity since it revolves around maintaining a neutral sense of self…. Equanimity says we must hold limited pleasant and unpleasant feelings and reactions. Although I agree with this being best in professional and clinical settings, I do think that being human means feeling every emotion to its fullest and allowing yourself to feel them and be who you are. I struggled with the views of the article and found myself objecting to the practice.

The discussion of the concept of equanimity weighed heavily on the balance between accepting what cannot be changed and not caring.

One finding of this study important to reiterate was the immense value added to the course through the participants' willingness to share their unique perspectives and engage in respectful conversations about differing opinions. Many expressed the positive impact the setting had on their learning outcomes in their final reflections. One learner shared how the co-creative environment helped to enhance their critical thinking skills.

> Working in a group setting helped to create the comfort of learning and working with others to collaborate toward solutions and differing opinions. I have gained

> the knowledge and guidance I need to practice my critical thinking and problem-solving skills that are a significant part of becoming a physician.

Another participant shared how the setting demonstrated the importance of trust and collective effort amongst co-workers.

> The exploration of teamwork and adaptation has been an eye-opening experience. Collaborating with my peers during the course exercises has taught me the value of collective effort and shared success…Trusting my colleagues and valuing their contributions will be crucial in fostering a harmonious and efficient work environment.

These thoughtful conversations were only possible because the students all adhered to the session agreements stated in Session One. By assuming good intent and accepting that it is permissible to misspeak or make a mistake, trust and respect were built; each member of the group felt empowered to express themselves. Establishing the empowerment of each participant enriched the learning outcomes by tapping into eleven unique perspectives rather than ten individuals trying to conform to the single outlook of the facilitator.

CHAPTER FOUR

Insights for Future Study

Realizing Limitations

When participation in a course is voluntary and non-credit, there are several limitations that may arise regarding learner investment. It is human nature to prioritize tasks with the biggest incentives. Therefore, when working with an already taxed population such as students pursuing higher education, it can be challenging to find a full cohort of participants with the ability and willingness to invest the required effort and time into an endeavor that is not required of them.

From the inception of this pilot research study, it was anticipated that time would be the biggest barrier to navigate. The original target learner group was to have been medical residents across multiple specialties, such as Ob/Gyn, Pediatrics, Primary Care, Surgery, and Internal Medicine. In its original format, the course was set up to be experienced in six, two-hour sessions. It was soon apparent that this was an unrealistic request. Residents' time is tightly scheduled with long rotation hours, course work, and secured study time. Twelve hours of availability over six weeks was not feasible. To accommodate the time deficit, the course was adjusted to meet the same objectives in three sessions. However, even with the time commitment cut in half, it was still impossible for interested residents to align their schedules with residents in different specialties. The multiple conflicting schedules resulted in a necessity to select an alternate learner population with more flexibility in their schedule. The residents who had shown interest in participating expressed disappointment when the decision was made to not proceed. These residents who saw value in the content being offered, were eager for the opportunity to step away from the clinical environment in which they currently were immersed and look at their work through a different lens. The eagerness the residents expressed suggests a need to consider

the possibility of adding humanities courses and experiential communication activities to residents' reserved time. A small step toward this goal was taken in 2019 with the Ob/Gyn residency program at Tampa General Hospital. The decision was made to use a few scheduled wellness hours each quarter to host a medical improv workshop focused on teamwork and resilience, which resulted in positive reactions from participants, and requests for more workshops. This example further justifies the proposal to formally incorporate Medical Humanities workshops into medical residency programs.

The study was adapted to engage undergraduate pre-health scholars. The study was scheduled to take place in July, a time when most students have a lighter course load and more free time. These adaptations cleared the obstacle of time constraint, but there were still other limitations with which to contend.

The program was originally set to take place in Downtown Tampa at the Center for Advanced Medical Learning and Simulation (CAMLS). This building contains large, private spaces which accommodate intimate and interactive learning sessions. However, most of the new participant population of undergraduate students attended classes and resided on University of South Florida Main Campus, which is twenty-five minutes North of Downtown; therefore, a group learning room on the main campus was reserved for each session instead of at CAMLS. The students helped the facilitator move tables and chairs to the sides of the room prior to beginning each session as facilities could not secure the setup prior to the start of the study. The group adapted to the space and found the room sufficiently large enough to perform the exercises, but some students remarked in their post-interview that they felt a little cramped, especially when lying on their yoga mats for meditation practice. The students found it hard to

detach from the awareness of their neighbors being very near, which made attuning to the meditation guide more challenging for some.

A third limitation, which can be anticipated with any volunteer study, is learner investment. The IRB and consent form stated that learners could end their participation in the course at any point. The class was not graded, and without institutional funding, no monetary incentive could be offered. The only repercussion of early dismissal from the pilot study was that a learner who did not complete the course would not receive the certificate of completion offered by the University of South Florida, Department of Experiential Learning and Simulation. To qualify for the certificate, participants were required to be present for all sessions, submit all written assignments, and participate in a one-hour post interview with the primary investigator of the study. All participants did attend every session and promptly completed their post-interviews. However, one participant did not turn in any written assignments. When asked for the journals, this student responded that assignments were hand-written and needed to be typed. The study's research assistant, Christie Eugene, offered to accept the reflections in handwritten form and transcribe them herself. Eugene had provided this service for two other participants who preferred to journal in a notebook. Unfortunately, after two attempts by Eugene to receive them following the final session, the journals were not submitted. Despite the participant sharing positive outcomes in their post interview, their data had to be dismissed from the study, and they did not receive the Certificate of Completion. One other participant neglected to turn in a final essay, in which participants were asked to summarize their experience, and articulate their personal learning points, including suggestions for improvement. The essay was due one month following the last session. This student did not receive the certificate, but their data was included

in the qualitative analysis as their written assignments, class participation, and final interview provided enough response data to characterize this student's experience in the course.

When providing classes that do not hold the embedded expectations of a graded course, it is imperative to offer learners any incentives or accommodations possible to encourage adherence to the course objectives and assignments. The investigative team of this pilot study thought extensively about how to promote learner investment. Overall, this cohort of undergraduate pre-health scholars exceeded expectations and devoted time between sessions to read and contemplate the assigned articles, practice the exercises we did in class, and make connections to how the skills could impact their lives. When asked what initially prompted them to participate, and what incentivized them to invest so much time and effort, the learners shared similar rationales; many of which validated the investigative team's strategies to encourage participation. Incentives to participate included scheduling the course offering in the summer when students' time was more flexible. Deciding to conduct the course on the main campus, so it was convenient to attend, also proved to be an incentive. Students also noted that they wanted to take advantage of the opportunity for experience participating in a research study to gain knowledge that would support their future education. Additionally, they indicated that having a certificate from a department in the USF College of Medicine would be a great addition to their CV. Many also shared that they were interested in the topic of Medical Humanities and the experiential practices.

Many limitations affected the validity of this pilot study. Firstly, the sample size of participants was exceedingly small. The results reflect the experience of the specific cohort tested but cannot determine a larger impact of these practices on all pre-health learners. Two participants neglected to complete all the written requirements used for analysis, further limiting

the data incorporated into the qualitative analysis. The duration of the course was three weeks, and the participants were assessed individually via a post-interview, up to one month after the study coursework and activities were completed. The short timeline of inquiry could not generate data substantial enough to declare any longitudinal impact. The analysis and results of this study, which suggest Medical Humanities practices are effective tools for increasing self-awareness and interpersonal connection, should be considered as preliminary and anecdotal. For more conclusive results further research must be conducted.

Possibilities for Future Research

Many researchers point out that further study is needed to determine what practices assist with growth of compassion and communication skills beyond dispositional ability (Gorgas, et.al, 2015). This pilot study serves as an introduction to what could be learned through sustained practice of applied experiential humanities practices such as improv, meditation, close reading, and reflective writing. This course included only three, two-hour sessions yet resulted in promising growth outcomes in learners. Further studies, including full-length courses and longitudinal studies would help to better determine how these practices contribute to transformational and sustained skills.

The positive effects of the study discerned by the participants mirror the results of many of the studies of empathy, compassion, and communication training discussed in Chapter Two. Patel, et, al (2019) reviewed fifty-two studies concerning compassion and empathy training sessions, of which seventy-five percent proved to improve physician empathy and/or compassion. Boissey, et al.'s (2016) eight-hour experiential communication skills training also suggested that experiential communication skills training can benefit health care learners and providers at any stage of their training and practice. Reports submitted by students

following participation in the Medical Humanities course at Rocky Vista University, in Parker, CO between 2017 and 2019 demonstrated that the format helped students to become more compassionate, and their capacity to be reflective grew throughout their time meeting as a team (Horst, et al., 2019). The positive findings of the reported systematic reviews and training evaluations suggest that such training is important and effective for health care learners and professionals.

The pilot study on which this dissertation is based, *Enhancing Understanding through Self-Awareness: A Medical Humanities Approach to Increasing Practitioner Self-Awareness and Strengthening Patient Connection* underwent multiple adaptations prior to being conducted. The target audience of medical residents was chosen given the assumption that one must have gained experience as a practitioner in the medical field to make connections to the medical arena. Prior to this study, much of my experience facilitating experiential Medical Humanities workshops, such as medical improv, has been with medical students and faculty. Further, my colleagues engaged in similar work also focus on medical students, residents, and faculty. It was not in my purview to consider pre-health scholars. However, the knowledge gained through the experience of working with the cohort of this study broadened my scope of understanding regarding the ways these practices can yield transformative results for learners at any stage. Although pre-health scholars are not yet treating patients, many of them have gained insight through shadowing or working in related positions such as a pharmacy technician. These experiences, in conjunction with reflection on their personal lives and consideration of clinical experiences from the patient's perspective, provided them the ability to make connections and realizations they could currently strengthen to better prepare them for the future. These learners shared that they felt better prepared at the end of the course to handle their emotions and lessen their risk of

burnout or being triggered by traumatic scenarios in a clinical setting. The participants also shared examples of what they learned regarding the ability to communicate more effectively and listen more intentionally, which are important skills that may be utilized as they progress in their clinical journeys. In their post-interview, one learner mentioned that they wished a class such as the pilot study was available to undergraduate students as a full-course humanities credit. They thought all pre-health students would benefit from study of these topics.

The outcomes of this study suggest that it would benefit the medical community to add to the curriculum at the undergraduate level more course opportunities that focus on topics of emotional intelligence, self-awareness, and communication. To best assess the success of Medical Humanities experiential practices as transformational tools which enhance awareness and emotional intelligence skills, I propose a cross-institutional longitudinal study. Students would be introduced to the topics and practices within their undergraduate years, and would participate in workshops, surveys, and interviews throughout residency. The longitudinal structure of this proposal would provide researchers the ability to track observed growth regarding the application of learned awareness and emotional intelligence skills practice, as well as the perceived impact of the exercises on learners' personal growth. This proposal is lofty, and many obstacles would need to be overcome to bring it to fruition. However, there are more attainable opportunities to continue the advancement of these practices in medical education.

Educators interested in furthering their understanding of and engagement in experiential Medical Humanities practice, may benefit from affiliation with the multiple budding associations and academic groups that offer support in promoting the humanistic side of medical education.

Founded in 2019 by five interdisciplinary medical improv facilitators employed at different universities across the United States, the Medical Improv Collaborative (MIC) fosters

collaboration among professionals who provide medical improv workshops at their institutions. MIC offers community and network building opportunities for interdisciplinary professionals in the United States and Canada through online and in-person meetings. They host a robust Research Ensemble dedicated to producing new research and conducting literature reviews of new findings related to medical improvisation. Members may also serve on the Curriculum Collaborative team which is working to define standard objectives of medical improv practice, and to create a database of resources and tools from which all MIC members can benefit. The International Association of Communication in Healthcare (EACH) was founded by Dr. Jozien Bensing and Dr. Sandra van Dulmen, from the Netherlands Institute for Health Services Research in 2001. Originally, EACH served eight European countries as a multidisciplinary community of people conducting communication research and training. Now EACH encourages international and cross-institutional partnerships that further understanding, procedures, and practices of teaching communication in healthcare.

Narrative Mindworks is an international narrative practices association devoted to advancing the field of narrative practices. They operate as a digital association portal that hosts interest groups and fosters professional networking.

Associations such as MIC, EACH, and Narrative Mindworks share a mission to expand the incorporation of experiential Medical Humanities practices in academia, support new research in the field, encourage opportunities to utilize artistic practices in the medical arena, and explore vast applications for the arts in medicine. By means of publications and presentations, organizations such as these will promote awareness of the merit of applied humanities and will create opportunities for larger research projects unattainable for one institution working on its own.

Unanticipated Discoveries

The Medical Humanities course upon which this manuscript is based relied heavily on debrief discussions following each experiential exercise. The purpose of these discussions was to define learning objectives, and to help learners discover take-home points of personal value. Each discussion was led with open-ended questions such as, How do you feel?, What surprised you?, and How does this apply to your life and/or in the medical context? Between each probing question, space was provided for the group to process experiences and share their perspectives. It was with intention that the learners were not directed to come to a specific response and instead were encouraged to think critically about what each exercise meant to them. Learning objectives were synthesized and summarized at the end of each discussion; both the pre-defined objectives and novel connections the learners made were incorporated. Due to the broad nature of the debrief discussions, two unanticipated themes began to form and repeat throughout the sessions. These themes derived from the participants' desire to use the tools presented in the study for self-improvement and to mitigate their potential for burn out. These themes are linked, as they are both of a personal nature, but the differentiation of the participant's relation to these themes was distinct enough to warrant separate consideration.

Self-Improvement

Nine out of ten participants shared that a personal incentive for participating in the study was to achieve personal growth, though this was not a specifically outlined objective of the course. The first outlined objective of the pilot course, as articulated in the title, was to provide experiences that would enhance participants' self-awareness. Once learners in this cohort became aware of behaviors or thought patterns they deemed as negative, they began to voice a desire to alter the trends they felt were holding them back. Examples of suggested behavior changes

ranged from cognitive shifts to altering daily habits that were counterproductive. Some referenced specific aspects of the study that prompted their self-discovery, and others identified a practice they planned to use regularly as a tool to help them reach their personal goals.

One participant shared that the collaborative and affirmative work they were doing in the study caused them to realize that they had been in a "negative, comparing space with [their] peers." Earning acceptance into college programs is extremely competitive. There is much pressure for high school and undergraduate students to excel above their peers to secure a place at a desired institution to achieve personal career goals. Colleges look for students who place in the top of their class academically, engage in extra-curricular activities such as sports, school clubs, and Arts programs, and participate in volunteer opportunities. The average GPA for the incoming class of 2028 at University of South Florida was 4.10-4.59. The average SAT score was 1250-1390, and the average ACT score was 27-31(University of South Florida, 2024). Candidates are also expected to be well rounded; evidence of engagement in clubs and extracurricular activities is required. Further, the admissions rate for the USF College of Medicine is 7.4% (International Medical Aid, 2023). Given these high expectations, it is natural that students would constantly measure themselves against the successes of their peers.

In 2018, a team of researchers at the University of Auckland, Auckland, New Zealand, explored the international prevalence and causes of depression in medical students. Student rankings in assessments, and a strive for perfection were both cited as sources of stress and anxiety that could lead to depression. Some assessment scores are derived by means of mathematical methods and these scores are used to rank students, even though the differences in their performance may be minimal. This system can lead to animosity and more competitive relationships among peers. Furthermore, some students possess characteristics labeled as "Type

A" (Moir, F, et.al, 2018), which include highly competitive attitudes and the need to work harder to achieve more than their peers. Those with this perfectionist disposition are more prone to aggression, impatience, and inappropriate self-expectations. These traits can be further exacerbated when learners are placed in a highly competitive environment, such as medical school (Moir, F, et.al, 2018).

A second participant also cited the team dynamic of the course as prompting a shift in mindset and a desire to alter their behavior moving forward. This participant reported feeling driven by personal success in the past, and preferred to work alone so they had complete control over the outcome. When tasked with a group project, they claimed that they tended to oversee and manage their partner's contributions. Through the group exercises in the study, they recognized the pattern in their past approach to group work and realized their "intense focus on personal success would sometimes overshadow the significance of trusting their teammates." Following the course, they shared that they are applying an effort to "let go and embrace the fluidity of collaboration." While engaging in team exercises during the course, the learner noticed that when they "allow[ed] others to contribute, [the group was] open to unforeseen outcomes… which enhance[d] the team's cohesiveness and effectiveness." The students that participated in this study discovered a way to see their peers' successes as opportunities for mutual growth, which the students referenced above noted as a positive shift of mindset. The gracious and generous nature in which the learners discussed their past experiences, inferences, and perspectives allowed them to gain knowledge through one another's successes. They became accustomed to viewing their peers as teammates rather than opponents.

These participants exceeded the objective of becoming more aware of their selfhood and noticing their personal patterns and preferences. Once identified, the students thought about how

these behaviors affected their personal and professional relationships and sought to change. These testimonials provide evidence of the ways that experiential practices can be quite transformative.

Mitigating Burnout

Although it is an important topic worthy of dedicated research, burnout was not directly addressed in this study. However, the students were encouraged to bring up any topic of concern tied to their self-awareness and relationship to others. Given that the cohort's population was composed of high-functioning, goal-oriented undergraduate students in a competitive and challenging field, it was not surprising that fear of burnout was a concern for many.

Burnout is defined as "a syndrome characterized by emotional exhaustion and depersonalization (which includes negativity, cynicism, and the inability to express empathy or grief), a feeling of reduced personal accomplishment, loss of work fulfillment, and reduced effectiveness" (Dzau, V., et al., 2018, p 312). Burnout affects physicians at a rate more than twice those of other professions; as many as 400 U.S. physicians die by suicide each year (Dzau, V., et al., 2018).

Medical students and residents are also more apt to experience depression and burnout than students studying in other fields. In 2021, a team of researchers at a university hospital in Spain conducted a systematic search using the UpToDate, PubMed and Mendeley platforms and entering the keywords, "suicide," "suicidal behavior," "suicidal ideation," "medical school," and "medical students." The search concluded that 45-50% of medical students experienced burnout, 27.2% experienced depression, and 11.1% of medical students experienced suicidal ideation (Lietor, M., et al., 2021).

Throughout this dissertation study, students made connections to the ways they believed certain exercises or concepts would help them avoid becoming burned out during their education and future career. They cited both the potential emotional and physical triggers of burnout as concerning.

Two participants disclosed that they suffer from anxiety. Social situations and times of anticipation could trigger symptoms of a rapid heartbeat, sweating, and light-headedness. Both participants stated that the discovery of guided meditation was "transformative" for them. One student shared that they were feeling nervous and shy at the beginning of the first session. They did not feel ready to speak up in the group. After the initial meditation study, they felt "a lot calmer and happier, and had the confidence to speak to their peers in the group." The other shared an experience outside of the study in which they leaned on a guided meditation they pulled up on their phone to get them through an episode of anxiety in a doctor's office. Both shared the desire to continue a regular meditation practice to help them cope with stressors that trigger anxiety.

The study sessions were all held at midday. One learner said that they were excited to come to the first class, but they often feel a wave of fatigue in the middle of the day, making it hard to rally the energy and motivation to be productive. In their reflection after the first session, they wrote about how the meditation exercise was relaxing and rejuvenating. It gave them an opportunity to reset when they didn't have time for a nap. During their final interview, they shared that they had committed to twenty minutes of meditation each afternoon and had experienced a drastic decrease in midday fatigue.

Another participant shared that they have been trained to always keep busy. This personal expectation to keep the brain busy has contributed to a habitual connection to their phone. After

reviewing the readings *Mind of the Meditator* (Ricard, 2014), in which the positive neurological impact of meditation was discussed, and *Epistemologies of Silence* (Dénommé-Welch & Rowsell, 2017) which addressed the positive effects of silence, this student began to intentionally step away from their phone and find time to sit in silence. They started to drive in silence rather than listening to music or talking on the phone, and they looked for hobbies that kept them grounded in the present moment such as coloring and doing puzzles. They were excited to show the jigsaw puzzle they were working on during their virtual final interview over Microsoft Teams. Examples of mindful practices were referenced during debrief discussions, such as mindful eating: acknowledging all your physical and emotional senses as you experience each bite (Hanh TN & Cheung L, 2010), and mindful walking: becoming aware of your surroundings, your mind, and the sensations in your body as you move (Sutton, 2020). We did not, however, discuss what hobbies could be used to increase present-mind awareness. This learner self-selected coloring and jigsaw puzzles as activities that they felt would help them detach from their phone and enjoy silence and the present moment.

Social and performance anxiety, fatigue, and cognitive overload can all contribute to burnout. Through this course, participants addressed these personal struggles and discovered tools to help them as they progress through their education and in their career. Mindfulness exercises, guided meditation, and reflective journaling were the components that the learners leaned into to help them cope with fears of burnout. The improv exercises were not referenced regarding this topic. One important factor to note: these learners did not come to their discoveries through the class practice alone. They each shared stories of times that they tried meditation and mindfulness activities, such as sitting in silence and doing puzzles outside of class time. Their adherence to the course objectives, willingness to continue the practice between sessions, their

curiosity, and their trust in the ways that these principles could improve their quality of lives provided them the transformative experiences they reflected in their post interviews and final essays.

CONCLUSION

For the purposes of this dissertation, an IRB approved study entitled *Medical Improvisation, Narrative Medicine, and Contemplative Practices in a Health Education Training Environment: A Medical Humanities Approach to Increasing Self-Awareness and Strengthening Interpersonal Connection* (Study # 004892) was conducted with a participant population of pre-health scholars currently enrolled in Bachelor of Science programs at the University of South Florida.

The study consisted of three, two-hour sessions. The Medical Humanities curriculum engaged learners in various experiential practices to promote self-exploration, and elicited applications of their findings to the clinical context. The course combined the specific humanities practices of assigned academic literature, mindfulness meditation, medical improvisation, poetry composition, and reflective journaling to provide a holistic approach to self-discovery and human connection.

To enhance understanding, sessions centered around core principles defined as themes, and practice exercises utilized specific skill sets, defined as subtopics. Session One addressed the theme of attunement. The subtopic skills incorporated in Session One were non-judgment, utilizing silence, and present-moment awareness. Compassion was the theme of Session Two. The subtopic skills practiced in this session were building connection with "the other" and affirmation. The theme of Session Three was adaptability. This session explored equanimity and empowerment as subtopics. The themes and articulated subtopics were selected to isolate individual and nuanced aspects of self-awareness and human interaction. The order in which they would be presented was decided with the intention of building upon each previous principle in practice. First, students would practice attuning to themselves and their environment. Next,

learners would be encouraged to embrace a compassionate mindset and challenged to look beyond their personal perceptions, enabling them to envision their environment with a new perspective. Finally, empowered with new tools and insights, they would begin to conceive ways of adapting their approach to enhance their communication and relationships with others in the clinical environment.

The literature that addresses attunement, compassion, and adaptability as tools for communication and deeper understanding suggests that experiential workshops are effective at increasing learners' ability to be more attuned to the present-moment, express compassion, and become more adaptable in uncertain circumstances, particularly when a safe space is ensured, and the objectives of the session are transparent and strictly followed.

Qualitative data of the conducted pilot study, collected through weekly journal entries, a final reflection essay, and a post-study interview completed by each participant was categorized into the course themes (attunement, compassion, and adaptability) and the course practices (improvisation, meditation, reflective writing, and literature). The results aligned and supported the current literature, strongly suggesting that experiential workshops incorporating Medical Humanities practices and themes are effective in promoting self-awareness and teaching clinical communication skills.

The sample size of the participants involved in the pilot study conducted for this dissertation was small and there were no quantitative pre and post measures recorded; thus, the results can only be considered as anecdotal. However, the growth displayed through participant responses, paired with the reviewed literature, provides beneficial support to promote enhanced training and research in the field of Medical Humanities.

This dissertation contains unique findings that contribute to the field of Medical Humanities as suggestions of specific areas that would benefit from further exploration. The pilot study incorporated three different Medical Humanities practices (med improv, mindfulness exercises, and reflective journaling) and demonstrated how they could work together to target different aspects of self-reflection and interpersonal connection to enhance overall outcomes. Current Medical Humanities research weighs heavily on populations already advanced in their clinical studies and practice (i.e. medical residents, healthcare practitioners, and medical faculty.) This pilot study utilized students still earning their Bachelor of Science degrees in pre-health fields and identified how introducing the topics of self-awareness and interpersonal communication from a clinical perspective could strengthen learners' ability to build authentic connections with future patients and care teams. The opportunity to foster communication tools prior to learning clinical skills provides the potential to infuse learned interpersonal communication skills into their clinical conversations from the start.

This dissertation also includes specific exercises, objectives, and facilitation tools that could benefit other facilitators incorporating Medical Humanities practices into their curricula. A dominant outcome of this qualitative study that was supported by the literature review was the importance of creating a safe space for experiential courses and steps a facilitator can take to foster and maintain such a space. These findings shared through participants' reflections can be utilized as tangible tools for facilitators striving to create an environment conducive for self-exploration, co-creation, and group discovery.

APPENDIX

Original Curriculum for Six Session Study

This course is designed to be completed in six, two and ½ hour sessions. This may be adapted to meet the needs of the curricular calendar. This course is designed for 8-14 students but can accommodate larger groups.

Course Objectives

It is imperative that medical practitioners perceive the articulated and unvoiced needs of their patients accurately to provide efficient care. Implicit Bias is "the unconscious prejudice in favor of or against one person or group or another" (Turner, 2021, p. 1727). This bias could create barriers to a practitioner's ability to create a care plan that incorporates their patient's personal needs; a plan to which the patient feels they can adhere. In this 6-week experiential course, learners will engage in various contemplative and artistic practices in a safe space of self-exploration and will elicit applications of their findings to the clinical context. This course combines assigned academic literature, mindfulness meditation, medical improvisation, and reflective journaling to provide a holistic approach to self-discovery. Learners will participate in debrief discussions focused on the literature and practices and will be encouraged to share their personal discoveries. At the end of this course, learners will submit a reflective essay citing their personal journey throughout the course and articulating how they will apply these findings to their relationships and clinical practice moving forward.

Course Supplies and Setup

This course requires a large amount of open space in which learners can comfortably move and explore. The space requires one chair per participant and two whiteboards. No tables

should be set up in the space. Learners are encouraged to bring a yoga mat to class and to wear comfortable clothing in which they can freely move.

Session 1: Non-Judgment and Present Moment Awareness

Session one will focus on building a safe space for the learners; one in which they feel invited to openly explore the vulnerable arena of implicit bias, build self-awareness without judgment, and share their discoveries. As learners come into the space, they will be guided to find a place on the floor, sitting on their yoga mats, if that is preferred. After an initial introduction, students will be asked to share why they chose to take this course. The instructor should inquire about the learner's past experiences with mindfulness, improvisation, and reflective writing and prompt learners to share their comfort levels with these types of practice. This will provide the instructor with valuable insight on how to cater the course to the level of this group. They will also be asked what challenges they face with patient communication, including the kind of conversations that are challenging, as well as what specific scenarios or populations they find challenging. The instructor will record their responses on the white board to demonstrate common themes or unique differences.

As in mindfulness training, theatrical improvisation frames mistakes and missteps as opportunities for growth as opposed to failures or deal breakers. Improvisation requires that participants do not anticipate their next step, but rather react genuinely in the moment. When people act spontaneously, subconscious ideas may come out, providing learners the opportunity to acknowledge and process these self-discoveries and personal drivers of behavior. It is imperative to the safety of the individuals and the class as a unit, that all participants bring an awareness that no one is perfect, acknowledge that everyone present is committed to growth, and always assume good intent. The group will repeat in unison, "I don't have to be perfect!" and

"Assume good intent" to affirm to themselves and each other the commitment they are making in this course to be compassionate with themselves and each other. A "Failure Bow" (Smith, 2012) is an affirmation tool many improvisers utilize when they make a mistake in a scene or improvisational game. If they feel they have broken a rule or agreement in the exercise, an improviser will pause, and then declare loud and emphatically, "I Made a Mistake!" The whole crew will then cheer for the improviser, congratulating them on their accountability and opportunity for growth. This sign of affirmation is liberating and healing, allowing the improvisor to gain the confidence that they are forgiven and release any negative emotions. They are able to move forward without the distraction of rumination. The learners will all practice a failure bow as a group and will be instructed to continue this practice throughout the six sessions, whenever they feel appropriate, except for during meditation practices.

Meditation Practice and Debrief Discussion

Fifteen-Minute Guided Mindfulness Meditation (Jon Kabat Zinn): This guided meditation is very supportive and offers an empowering introduction to mindfulness meditation. Kabat-Zinn provides many reminders to note distractions and mind wandering and then allow the thoughts to dissipate without judgment. This practice will position learners in a proactive, forgiving mindset, preparing them to approach vulnerable topics to come.

Improvisation Exercises and Debrief Discussion

Clown Ta-Da (Credit Val Lantz Gefroh, MFA, UC San Diego): Students will pair up and will alternately count to 3**. EX. Person A: 1, Person B: 2, Person A: 3, Person B: 1, etc.** Every time a participant makes a mistake, both partners throw their arms up and shout "Ta-da!" In the next round the number 2 is replaced with a Clap. In the final round the 2 is replaced with a Clap and number 3 is replaced with a Stomp.

Zip, Zap, Zop: Participants stand in a circle and pass the pattern randomly around the circle. When one participant sends a word to another, they must make direct eye contact and point toward the receiver to ensure they are articulating clearly to whom they are sending. A fast pace should be maintained. When the pattern is broken, the participant that made the mistake will do a "failure bow," allow everyone to cheer, and then pick up where they left off.

These exercises are fast paced pattern games with a high probability of mistakes. Students are unable to anticipate during these exercises. To be successful, they must stay present in the moment, fully focused on their peers. Affirmation is reinforced with the collective celebration following each mistake.

Assignments to prepare for Session Two, Looking Deeper with Compassion

Start a meditation practice. The goal is 10 minutes per day. Write your first journal entry. Reflect on what your experience was like in the first session, as well as insights or applications that arise throughout the week.

Assigned Reading: Ricard, M., Lutz, A., & Davidson, R. (2014). Mind of the meditator: Contemplative practices that extend back thousands of years show a multitude of benefits for both body and mind. *Scientific American*. Written by Ricard, a molecular biologist and Buddhist monk, and neuroscientists, Lutz and Davidson, this article provides a foundational description of what meditation is and discusses the physiological changes that occur in the brain through meditation. Ricard, et al., demonstrate how meditation can enhance well-being as well as improve the ability to cultivate compassion for others. Further, this article addresses loving kindness meditation which will be an objective of the next lesson.

Common Ground: Frameworks for Teaching Improvisational Ability in Medical Education (Fu, B. 2019). The Belinda Fu Model is a proposed framework for utilizing

improvisational skills in medical education. The core principles of improvisation are applied to three outlined objectives: attunement, affirmation, and advancement.

Session 2: Looking Deeper with Compassion

Meditation Practice

15-minute Loving Kindness Meditation (Steven Hickman, PsyD): This meditation begins by reminding practitioners the importance of cultivating an attitude of compassion, kindness, passion, curiosity, and openness toward ourselves. This reinforces the core standard of the course, to proceed without judgment and to assume good intent. Hickman then guides the practitioners to bring people into their awareness, starting with individuals that are close to them and then moving out to someone they have trouble getting along with and sending the following wishes to them, "May you live in safety and health. May you have understanding. May you be happy. May you have ease of being."

Discussion of Reading, Mindfulness Practice, and Journals

The class will sit in a circle to discuss the readings and offer reflections. They may share the content of their first journal entry if they choose.

Improvisation Exercises

Walk Like a (Watson, 2016): During this introspective exercise, participants walk around the room without engaging with each other. Prompts are read that detail individuals and their specific circumstances. The participants try to physically embody who they envision these individuals to be as they walk through the space. They are encouraged to contemplate how they hold themselves, how they walk, and at what pace. Participants will engage in three separate scenarios.

The objective is to discover what assumptions we make about others before knowing the whole story. This exercise brings to the forefront how our past experiences and inferences can shape how we implicitly categorize the world around us. For example, assuming a person's gender and race based on external factors such as their career, education, or economic status.

Movie Star Interview (Belinda Fu): Participants take turns interviewing each other as if they will play the other in an upcoming movie. The "method actors" try to think through the lens of the other and will use the first person to ask their questions. For example, the interviewer may ask, "Where was I born?" In turn, the interviewee will respond, "You were born…" and provide the place the interviewee was born.

The context of this exercise is to truly come to an understanding of who their partner is, to be able to play them authentically, rather than to simply obtain basic facts about them. Participants often feel permission to dive deep in their questioning, providing the potential to foster a connection very quickly.

Assignments to prepare for Session Three, Equanimity and Affirmation

Continue meditation practice of 10 minutes per day. Write at least one journal entry. Reflect on what your experiences in class, as well as insights or applications that arise throughout the week.

Assigned Reading: Relating Equanimity to Mindfulness (Anālayo, 2021): This article surveys key passages on equanimity and attempts to differentiate different types of equanimity in the Buddhist tradition. Anālayo proposes three types of equanimity: equanimity as hedonic neutrality (a feeling tone), equanimity as interpersonal impartiality (a divine abode or immeasurable state), and equanimity as equipoise (a state of mental balance).

Session 3: Equanimity and Affirmation

Meditation Practice

How to Develop Genuine Equanimity (Rick Hanson, 2020): In this 35-minute meditation on equanimity, Hanson guides practitioners to maintain a sense of presence and calm abiding. He asks meditators to anchor themselves to the present with a bodily sensation such as their heart beating or their breath. Hanson prompts meditators to see how long they can maintain present awareness by silently counting to 10s or thinking "in" and "out" with each breath.

Discussion of Reading, Mindfulness Practice, and Journals

The class will sit in a circle to discuss the readings and offer reflections. They may share content from their journals if they choose.

Improvisation Exercises

"Yes, and" (Final Phrase Credit: Belinda Fu): Participants are split into pairs. They are given a topic and then engage in back-and-forth conversations about the topic. They must use statements only, no questions. After the initial statement, every statement must start with the words, "Yes, but." The process is repeated first using the phrase, "Yes, and," and finally, "I appreciate you saying that because."

Even though you may not agree with the improvised initial statement, affirming the other's perspective and then offering your own allows the conversation to move forward and offers potential for collaboration. As in equanimity, you can note that you do not like something without allowing it to affect you or how you choose to move forward. The class will be asked to contemplate and share how a "yes, and" perspective can be beneficial in a variety of clinical or surgical settings.

Word-At-A-Time Expert: Five participants link arms and answer an open-ended question from the observers, one word at a time. When they collectively feel that the question has been answered, they simultaneously bow.

Staying present in the moment and avoiding anticipation, mind-wandering, and frustration allows true collaboration and co-creation to happen. You can note dissatisfaction with the word that precedes yours without allowing it to distract or upset you.

Assignments to prepare for Session 4, Empowerment and Connection

Continue meditation practice of 10 minutes per day. Write at least one journal entry. Reflect on what your experiences in class, as well as insights or applications that arise throughout the week.

Assigned Reading. The Fortunate Physician: Learning from our Patients (2004): This chapter introduces concepts such as unconscious motivation, transference, intersubjectivity, and empathy as clinical tools to bring into the doctor-patient relationship.

Contemplative Reading Assignment. Read the following passages slowly and carefully, one at a time. Take some time to reflect on what you have read. Read them again. Record your thoughts in your journal.

The Other Side (n.d.): One day a young Buddhist on his journey home came to the banks of a wide river. Staring hopelessly at the great obstacle in front of him, he pondered for hours on just how to cross such a wide barrier. Just as he was about to give up his pursuit to continue his journey, he saw a great teacher on the other side of the river. The young Buddhist yells over to the teacher, “Oh wise one, can you tell me how to get to the other side of this river”? The teacher ponders for a moment, looks up and down the river and yells back, “My son, you are on the other side.”

A Cup of Tea (Reps & Senzaki, 1998): Nan-in, a Japanese master during the Meiji era (1868-1912), received a university professor who came to inquire about Zen. Nan-in served tea. He poured his visitor's cup full, and then kept on pouring. The professor watched the overflow until he no longer could restrain himself. "It is overfull. No more will go in!" "Like this cup," Nan-in said, "you are full of your own opinions and speculations. How can I show you Zen unless you first empty your cup?" (Reps & SenZaki, 1998)

Session 4: Empowerment and Connection

Discussion of Readings

The class will sit in a circle to discuss the readings and offer reflections. They may share the content of their journal entry if they choose.

Meditation Practice and Debrief Discussion

Visualization Exercise: The instructor will guide the participants through a contemplative journey. Learners will be asked to imagine a place in which they find uncomfortable. It can be a specific location to which they have been or a place they imagine. What does it look like? How does it feel? How does it smell? What sounds do you hear? Who else is there? Walk around and explore. Are there areas you feel apprehensive about approaching? Why? What about this place makes you uncomfortable? What do you need to do to feel safe? Now visualize a place that brings you pleasure. What does it look like? How does it feel? How does it smell? What do you hear? Who else is there? Walk around and explore. Are there areas that you feel called to? Why? What about this place brings you pleasure? Safety? Familiarity? Fun?

Improvisation Exercise

"Hello ____" (Credit Dan Sipp): Participants are partnered and take turns greeting each other with "Hello, (name), while expressing a specific emotion. The partner then responds with "Hi (name), you look___" and names the emotion they perceive. If they do not name the exact emotion their partner intended, they reset and try again until the emotion is named.

This exercise demonstrates how individuals externalize and perceive emotion differently. While some are very expressive, some are more reserved. Assuming one's perspective or emotional state without seeking clarification can lead to misinterpretations and misunderstandings that may cause a barrier in the relationship or hinder the ability to provide better care.

Time Traveler (Katie Watson): Done in pairs, one person pretends to be from the year 1776 and their partner must explain to them what a microwave is. They should explain how and why they are used.

The objective of this exercise is to showcase how most patients' health literacy levels are not that of their medical practitioner. Further, a patient may have needs or desires based on their specific culture, religious beliefs, or past experiences that differ from that of the clinician's agenda. Asking questions to gain a better understanding of the patient's perception or understanding first is a great tool to finding a path that accommodates both parties.

One up, One down (Belinda Fu): Done in pairs, one student tells their partner something they are proud of. (Ex. I recently read the entire *Lord of the Rings Trilogy*). The partner then replies with a statement that raises themselves. (Ex. I don't have time for fiction, keeping up with current events, my career, and social obligations.) The student repeats the statement and this time the partner responds with a statement that lowers themselves. (Ex. Wow, I get so distracted. I

have so many unfinished books on my shelf.) The third time, the partner lowers the other. (Ex. Imagine all the time you wasted on fairy tales rather than networking and keeping up with current events.) The last time, the partner raises the other. (Ex. Wow, what an amazing accomplishment. I bet they are way better than the movies.)

We have a choice of how to respond in any exchange. We tend to have default modes of communication of which we may not be aware. Some modes may feel more familiar than others. Mindful, present awareness provides us the space to be more attentive in our communication with others and to be more intentional in the way we respond.

Assignments to prepare for Session 5, The Power of Silence

Continue meditation practice of 10 minutes per day. Write at least one journal entry, while reflecting on your experiences in class, as well as insights or applications that arise throughout the week.

Assigned Readings. Epistemologies of Silence (Denomme-Welch and Rowsell, 2017): The authors explore questions of silence and its impacts on their respective teaching, research, and professional practice. This article considers "different expressions and meanings of silence and how this can offer new understanding of culture and identity, including social and political issues, through arts, performance and arts-based research" (10). Silence invites all kinds of misunderstandings and misassumptions, but then again it also has the potential for self-reflection wherein one's own judgment or biases are called into question." (22)

Session 5: The Power of Silence

Meditation Practice

Fifteen-minute Sitting Silent Meditation

Discussion of Reading, Mindfulness Practice, and Journals

The class will sit in a circle to discuss the reading and offer reflections. They may share content from their journals if they choose.

Improvisation Exercises

"Hi, how are you?": Two volunteers will be given pieces of paper that tell them their current state of being. (Ex. Person A: You just received exciting news you can't wait to share. Person B: You are on your way to take care of something about which you are really anxious.) The pair then presents the following scripted conversation. Person A: "Hi." Person B: "Hello." Person A. "How are you?" Person B: "I'm fine, thanks." The observers then break down all the concrete observable behaviors that they noted during the five second exchange, such as, "Person A was averting eye contact." The observations are listed on the board. Assumptions or assignments of the actor's motives, such as "Person A didn't want to talk to Person B," are redirected to elicit concrete observable behaviors.

Communication is so much more than language. We can elicit and communicate meaning and intention through our tone of voice, facial expressions, volume, physical proximity, pace, and body language. There is a story in the "silent space" if we are willing to listen to more than the words.

Status Cards (Katie Watson): Every participant is given a playing card to put on their forehead without looking at it. They are told they are at an elite awards ceremony, and they are to walk around the room and mingle with each other. The card on their forehead signifies their status in this group. 2s have the lowest status, Kings are at the top. (Aces are not used.) After 5 minutes, the learners are told to line themselves up in number order without looking at their card. When they are satisfied with the line-up, they look at their number.

Even though we generally feel we see everyone as equal, and treat every person with dignity and respect, we can easily slip into a superiority stance and know exactly how to lower another. How do you treat people differently depending on the context of your environment or relationship? Is it always intentional?

Assignments to prepare for Session 6, Wrap-up: Putting the Pieces Together

Continue meditation practice of 10 minutes per day. Write at least one journal entry, reflecting on your experiences in class, as well as insights or applications that arise throughout the week.

Assigned Readings. The Doctor-Patient Relationship as a Gadamerian Dialogue: A Response to Arnason (Widdershoven, 2000): This article proposes looking at a clinical encounter as a Socratic dialogue, one in which the patient is encouraged to actively take part in the process of making sense of the situation. When a patient refuses treatment, or when the provider is met with a strong negative reaction, this is an invitation to engage in a question-and-answer interlude, in which both parties try to understand the other's perspective.

An Ethic of Care (Tronto, 1998): Tronto emphasizes the necessity to perceive the articulated and unspoken needs, and personal priorities of the patient with as little distortion as possible. In this essay she outlines the process of care in four phases. These phases are Caring About, Caring For, Caregiving, and Care Receiving.

Session 6: Wrap-up: Putting the Pieces Together

Meditation Practice

10 Minute Walking Meditation

Discussion of Reading

The class will sit in a circle to discuss the reading and offer reflections from the body scan.

Course Content Debrief

Students will start in pairs and share one thing they gained from the course. Each pair will join another pair to discuss their discoveries in groups of four. The groups will then come together for a large group share out. Students will be encouraged to reflect on their journey and self-discoveries over the course and share what impacted them most. They can speak to their journal entries, class discussions, their mindfulness practice, and the class exercises. Honest reflections are encouraged, which may be positive or constructive in nature. They will list as a group all the skillsets they gained that they could apply to their practice and relationships moving forward. Everything will be listed on a white board. Finally, the white board from the first class will be taken out. We will compare the two lists and make connections of how the tools on the second white board can assist with the challenges on the first. We will discuss how the participants now feel looking at the original list. Do they still feel the same way?

Improvisation Exercise

Rock, Paper, Scissors Tournament: Learners will turn to a partner and play one round of rock-paper-scissors. The “loser” becomes the cheering squad for the “winner.” The winner proceeds to find another winner to compete with. The “loser” and their cheering squad will join the cheering squad of the “winner.” Play ensues until there is one final winner and everyone celebrates.

Final Assignment

Students will be asked to write a 1300-word final reflection report. They may draw from their journals and should include 500 words citing their experiences with the literature and practices of the course, 500 words on the skills they will try to apply to their professional practice and personal lives moving forward, and 300 words on their final take-home points.

Recruitment Letter

Good morning,

Thank you for your interest in the IRB Research Study entitled, *Medical Improvisation, Narrative Medicine, and Medical Improvisation, Narrative Medicine, and Contemplative Practices in a Health Education Training Environment: A Medical Humanities Approach to Increasing Practitioner Self Awareness and Strengthening Interpersonal Connection* (Study # 004892).

The required attendance for the following dates includes **Friday, July 7th, Thursday, July 13th, and Thursday, July 20th**. All sessions will be from **10:00am-12:00pm on USF Main Campus in MDL 1038A (GL Room 2**).

These 2-hour sessions will include group interaction, reflection, and other introspective activities. Through experiential and contemplative practices such as improvisation games, meditation, and reflective writing, we will be exploring the connection between self-awareness and patient interaction.

As part of the research study, participants will be asked to participate in a post course interview to help us gain a more comprehensive understanding of their experience. The total time commitment for this study will be approximately 25 hours. The research will be the basis of the lead Investigator, Briana Tierno's dissertation for her Doctor of Medical Humanities and all data will be de-identified for your protection and confidentiality.

Upon completion of the study, you will receive a certification of completion from the USF Health Center of Experiential Learning and Simulation.

I have attached the consent form for your reference. We will review and sign as a group at the beginning of the first session.

Informed Consent Form

Informed Consent to Participate in Research Involving Minimal Risk

Information to Consider Before Taking Part in this Research Study

Title: Medical Improvisation, Narrative Medicine, and Contemplative Practices in a Medical Training Environment: A Medical Humanities Approach to Increasing Practitioner Self- Awareness and Strengthening Patient Connection

Study # 004892

Overview: You are being asked to take part in a research study. The information in this document should help you to decide if you would like to participate. The sections in this Overview provide the basic information about the study. More detailed information is provided in the remainder of the document.

Study Staff: This study is being led by Briana Tierno who is a Learning and Development Facilitator at USF Morsani College of Medicine, Department of Experiential Learning and Simulation. This person is called the Principal Investigator. Other approved research staff may act on behalf of the Principal Investigator.

Study Details: This study is being conducted at USF Health South Tampa Center for Advanced Healthcare and is supported by the USF Morsani College of Medicine, Department of Experiential Learning and Simulation.

The purpose of this study is to determine if a Medical Humanities curriculum containing mixed strategies of artistic and contemplative practices combined with group discussion and reflective journaling can increase learner's self-awareness. Further, we seek to determine if increased self-awareness can improve learner's abilities to understand and have compassion for their patient's perspectives and articulated desires.

Subjects: You are being asked to take part because you are a student in the health programs at University of South Florida. The goal of this research study is to provide space and opportunity for health profession learners to contemplate and explore how they relate to their environment and discover tools to build self-awareness and deepen the connection with their patients. We are seeking participants across all health fields. Your decision to participate in this study will not have any effect on your academic standing.

Voluntary Participation: Your participation is voluntary. You do not have to participate and may stop your participation at any time. If you choose not to complete the study, you will not receive the Certificate of Completion.

Your decision to participate or not to participate will not affect your student status, course grade, recommendations, or access to future courses or training opportunities.

Benefits, Compensation, and Risk: We do not know if you will receive any benefit from your participation. There is no cost to participate. You will not be compensated for your participation. You will receive a certificate of completion from the USF Morsani College of Medicine, Department of Experiential Learning and Simulation.

This research is considered minimal risk. Minimal risk means that study risks are the same as the risks you face in daily life.

Confidentiality: Even if we publish the findings from this study, we will keep your study information private and confidential. Anyone with the authority to look at your records must keep them confidential.

Why are you being asked to take part?

We are asking you to take part in this research study because you are a student in the health programs at University of South Florida. The goal of this research study is to provide space and opportunity for participants to contemplate and explore how they relate to their environment and discover tools to build self-awareness and deepen the connection with their patients.

Study Procedures:

Upon confirmation, you will email your name, preferred name, preferred pronouns, field of study, year in program, and age to the study research assistant, Christie Eugene. This information will be kept confidential, and data will only be presented in aggregate. You will be sent two Qualtrics Pre-Surveys to complete, Self- Awareness Outcomes Questionnaire (Sutton, 2016) and the Revised Jefferson Scale of Physician Empathy (Hojat, et al., 2002).

If you agree to participate in this study you will meet for three, 2-hour sessions, over 3 weeks between the months of June and July 2023. Sessions will include applied theatrical improvisation exercises, and contemplative and meditative practices. The sessions will also include debrief discussions focused on the literature and practices and you will be encouraged to share your personal discoveries.

At the beginning of the course, you will be asked to submit an approximately 300-word essay on your expectations and goals for the workshop.

Between each session you will submit at least one reflective journal entry and will be assigned 1-2 academic readings. The time commitment between sessions will be approximately 2 hours per session. All data collected will be de-identified for your privacy.

Following the last session, you will be asked to sit for a 1-hour virtual interview to discuss your experience with the course and any feedback for further development you would suggest. This interview will be recorded.

You will also be asked to submit a 1300-word final reflection (500 words to summarize your experience with literature and practice, 500 words to explain how you applied teachings to your work and personal lives, and 300 words to express your final thoughts and takeaways). Total time commitment for participants will be approximately 12 hours over 3 weeks.

At each visit, you will be asked to:

- Participate in group exercises and debrief discussions.
- You will be asked to share your experiences and reflections from group exercises and

  connections to your clinical practice.

- These sessions will not be recorded. Comments may be scribed by the research assistant. All

  comments will be de-identified.

Total Number of Subjects

About 4-10 individuals will take part in this study at USF.

Alternatives / Voluntary Participation / Withdrawal

You do not have to participate in this research study.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. If you choose not to complete the study, you will not receive the Certificate of Completion.

Benefits

The potential benefits of participating in this research study include:

After full completion of this study, you will receive a Certificate of Completion in the **Enhancing Understanding and Wellness through Self-Awareness: A Medical Humanities**

Approach to Increasing Practitioner Self-Awareness and Strengthening Patient Connection.

Risks or Discomfort

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

Compensation

You will receive no payment or other compensation for taking part in this study.

Costs

It will not cost you anything to take part in the study.

Privacy and Confidentiality

We will do our best to keep your records private and confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Certain people may need to see your study records. These individuals include:

- The research team, including the Principal Investigator, study coordinator, and all other research staff.
- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.

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- Any agency of the federal, state, or local government that regulates this research. This includes*:* the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, and staff in USF Research Integrity and Compliance.
- The de-identified results of this research study will be discussed in the Principal Investigator's PhD Dissertation at Drew University.

  We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are.

  If completing an online survey, it is possible, although unlikely, that unauthorized individuals could gain access to your responses. Confidentiality will be maintained to the

degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet. However, your participation in this online survey involves risks similar to a person's everyday use of the Internet. If you complete and submit an anonymous survey and later request your data, be withdrawn, this may or may not be possible as the researcher may be unable to extract anonymous data from the database.

You can get the answers to your questions, concerns, or complaints.

If you have any questions, concerns or complaints about this study, call Briana Tierno at 412-799- 3972. If you have questions about your rights, complaints, or issues as a person taking part in this study, call the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu.

Consent to Take Part in Research

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

_____ Signature of Person Taking Part in Study Date

_____ Printed Name of Person Taking Part in Study

Statement of Person Obtaining Informed Consent and Research Authorization

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in their primary language. This research subject has provided legally effective informed consent.

_____
_____ Signature of Person Obtaining Informed Consent Date

_____ Printed Name of Person Obtaining Informed Consent

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VITA

Student: Briana Jill Tierno

Date of Birth: Pittsfield, MA. October 26, 1983

Name of Parents: Sherrie Melinda Raymond

Wayne Tucker Raymond

Educational Institutions:

	School	Place	Degree	Date
Secondary:	Central High School	Brooksville, FL	HS Diploma	June, 2002
Collegiate:	Catawba College	Salisbury, NC	B.A. Honors	May, 2006
Graduate:	Drew University	Madison, NJ	D.M.H.	May, 2024