Turning the Spotlight on Shame:

Fostering Adaptive Responses to Feelings of Academic Shame in Medical Students

by

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ABSTRACT

The purpose of this action research study was to help medical students normalize feelings of shame related to academics and to respond to these feelings in more adaptive ways. Several cycles of research informed this study, which investigated the influence of an educational innovation. The innovation focused on helping medical students understand feelings of shame, foster self-efficacy in shame resiliency practices, and encourage help-seeking behaviors. In short, the study sought to understand how these medical students responded to feelings of shame related to academic performance before and after participation in the educational innovation. A total of 14 second-year medical students participated in this concurrent mixed-method study. The educational innovation was designed by this action researcher and informed by Brené Brown's shame resilience theory. Three sources of data were used to answer the research questions, including a pre- and post-innovation survey, interviews, and student journals. Major findings suggested that the educational innovation was effective in enhancing the study participants' knowledge of shame, increasing perceptions of self-efficacy in the practices related to resiliency to feeling of academic shame, as well as, promoting help-seeking behaviors. The data also revealed a range of academic shame triggers identified by these medical students. This action research study validated the need to normalize feelings of shame and support medical students developing practices for resiliency to this powerful feeling.

DEDICATION

This dissertation is dedicated to the students at the college of medicine in which I am employed. These learners inspire me daily by their genuine kindness, passion for medicine, and drive to succeed in medical school. It is a privilege to learn, support, and journey alongside them. In addition, this dissertation is dedicated to my husband who supported me each and every day, while he was working on his own doctoral studies. Finally, I dedicate this work to my family and friends. Their unwavering support, encouragement, and love were constant reminders to carry on and be strong.

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It is important to note that this dissertation would not have been possible without the work of Dr. Brené Brown. Her research not only provided a roadmap for understanding resiliency to feelings of shame, but her guidance, wisdom, and role modeling shared through her research, books, and talks were ever present as I wrestled with this research endeavor. Perhaps more importantly, she inspired me to live more courageously. I will always be in appreciation.

TABLE OF CONTENTS

Page

LIST OF TABLES ... xi

CHAPTER

1: INTRODUCTION AND PURPOSE OF THE STUDY ... 1

Background on Shame Culture ... 2

Shame Culture in the United States ... 2

Shame Culture in Higher Education ... 4

Shame Culture in Medical Education ... 4

Study Context ... 7

Setting ... 7

Problem of Practice ... 9

Early Reconnaissance ... 12

Findings ... 13

Additional Reconnaissance ... 14

Findings ... 14

Purpose of this Study ... 15

Research Questions ... 16

Informing Cycles of Research ... 16

Cycle 1 ... 20

Findings ... 21

Explanation of and Complementarity Data ... 22

Influence on Practice ... 24

Conclusion. ... 24

Cycle 2 ... 25

Findings ... 27

Explanation of and Complementarity Data ... 29

CHAPTER Page

Influence on Practice 30

Conclusion. 31

2: THEORETICAL PERSPECTIVES AND RESEARCH GUIDING THE STUDY 32

The Nature of Shame 32

Negative Self-talk, Shame's Voice 32

Shame and Related Emotions 33

Shame 33

Shame vs Guilt 35

Shame vs Embarrassment 36

Related Phenomena 36

Shame and Perfectionism 36

Adaptive vs Maladaptive Perfectionism 37

Shame and Imposter Syndrome 38

Theories About How People Work Through Shame 40

Compass of Shame 40

Resilience as Rebuilding Self 42

Shame Resilience Theory 43

Constructs, Sub-Components, and Definitions 46

Academic Shame 46

Shame Triggers 46

Connection, Vulnerability, and Help-Seeking Behaviors 47

Connection. 47

Vulnerability. 47

Help-seeking Behaviors. 47

CHAPTER Page

Responses to Feelings of Shame 49

Maladaptive Responses. 49

Adaptive Responses. 50

Summary of Theoretical Perspectives and Research Guiding the Study...... 51

3: METHOD 52

Action Research 52

Research Design 53

Setting 54

Population, Participants, and Sampling 54

Population 54

Participants 55

Sampling 55

Role of the Researcher 57

Data Collection 59

Purpose of the Study and Research Questions 59

Research Questions 59

Examined Sub-Components 61

Knowledge of Shame. 61

Self-efficacy of Shame Resiliency Practices 62

Intention of Help-seeking Behaviors. 62

Sources of Data 63

Quantitative Data 63

Pre- and Post-innovation Survey. 63

Quantitative Data Procedures. 64

CHAPTER Page

Qualitative Data ... 64

Post-innovation, Semi-structured Interviews. ... 64

Post-innovation, Student Journals. ... 65

Qualitative Data Procedures. ... 66

Data Analysis ... 66

Procedures ... 67

Quantitative Analysis. ... 67

Qualitative Analysis. ... 70

The Innovation ... 73

Informing Theories and Studies. ... 76

Innovation Acceptance and Use. ... 76

Trustworthiness of Study ... 78

Limitations of the Study ... 78

History ... 78

Maturation. ... 79

Practice Effect ... 80

Mortality. ... 81

Hawthorne Effect. ... 81

Researcher. ... 82

Size and Scope. ... 82

4: THE FINDINGS ... 84

Quantitative Findings ... 84

Repeated Measures Analysis of Variance ... 85

Qualitative Findings ... 87

The Anatomy of Shame. ... 88

CHAPTER Page

Deepened Understanding of Shame and Academic Shame. 89

Differential Diagnoses of Guilt and Embarrassment. 93

The Physiology of Academic Shame Triggers. 94

Academic Shame Agents. 94

Different Measuring Sticks. 97

Turning the Spotlight on Academic Shame and the Value of Vulnerability. 103

Exposing Shame... 103

Practicing Vulnerability. 105

Changes in Self-efficacy of Shame Resiliency Practices. 106

Practicing the Practices of Shame Resiliency. 107

Adaptive Responses to Feelings of Academic Shame. 109

Challenges to the Practicing of Shame Resiliency. 111

Counteragents to Feelings of Academic Shame. 113

Connection With Others as a Counteragent to Feelings of Academic Shame. 113

Help-seeking as a Counteragent to Feelings of Academic Shame.. 116

Challenges and Opportunities for Minimizing Feelings of Academic Shame and Fostering Shame Resiliency. 118

High Expectations and Perfecting... 118

Challenges Needing to be Negotiated. 120

Enhancing our Culture. 122

CHAPTER Page

5: DISCUSSION 130
Research Questions 130
Summary of the Findings 131
Research Question 1 131
Research Question 2 131
Complementarity of Data 132
Understanding Shame 133
Perception of Self-efficacy in SRP 134
Intention of Engaging in Help-Seeking Behaviors 135
Relationship to Literature and Existing Research 135
Shame Resilience Theory 135
Perfectionism 137
The Imposter Syndrome 137
Related Research 138
Innovation Acceptance and Use 139
An Alternative Pathway 140
Future Considerations 140
Integration 140
Research 141
6: REFLECTION 143
Lessons Learned 143
Practicing Shame Resiliency 145
Final Thoughts 146
REFERENCES 148
APPENDIX
A: IRB APPROVAL 153
B: POST-SEMI STRUCTURED INTERVIEW QUESTIONS 156

APPENDIX Page

C: POST-JOURNAL PROMPTS 159

D: PRE- AND POST-SURVEY 161

E: CODEBOOK 165

F: WORKSHOP ONE PLAN 171

LIST OF TABLES

Table Page

1. Summary of Action Research Concurrent Mixed-Methods Design and Process 17
2. Research Questions, Methodology, Method, and Sources of Data 60
3. Pre- and Post-Innovation Surveys, Coefficient-Alpha Estimate of Internal Reliability (n = 14). 69
4. Qualitative Data Analysis Process 72
5. Learning Objectives for ASRT's Three Workshops 74
6. Summary of the Active Learning Elements of the ASRT 75
7. Pre- and Post-Innovation Survey: Means and Standard Deviation (SD, F and p values) 86
8. Themes, Categories based on Codes, and Assertions 87
9. Academic Shame Agents (n = 12) 95

CHAPTER 1

INTRODUCTION AND PURPOSE OF THE STUDY

It was the end of Danielle's first year in medical school. Although she had her doubts, Danielle passed all her courses. She had heard the saying that medical school is like drinking from a firehose; however, in her opinion, it did not adequately capture the day-to-day demands of school. Throughout her first year, Danielle met regularly with her learning specialist to seek support, share her successes, and sometimes just to vent her frustrations. She often wondered why it seemed like school was so much easier for her classmates. During one visit, Danielle was in tears. She told her learning specialist that she was stupid and maybe she just can't do this whole doctor thing.

Fast forward to the beginning of her second year in medical school. Danielle wanted to meet with her learning specialist to develop a study plan to help her prepare for her first board exam that would take place in the spring. She was highly aware that if she did not pass this exam, her dream of becoming a doctor would be over. By the end of the conversation, Danielle left feeling confident, knowing that she had a solid study plan and nearly seven months to prepare.

Several months passed. The visits with her learning specialist stopped. Her learning specialist would reach out to check in on her, but there was no response. On occasion, her learning specialist would see her in a classroom or in the hallway, but Danielle avoided eye contact and would quickly disappear. It was late November when the director of the area requested a meeting with Danielle. During this meeting, she shared that she did not follow through with her study plan. Danielle could not bring herself to meet with her learning specialist to share this news. It was not about the plan

or even her learning specialist, it was about her: Danielle was responding to feelings of academic shame. Tears filled her eyes. Everything she was doing or not doing, felt like another painful reminder of not being "good enough."

Simply stated, feelings of shame affect us all (Brown, 2012). This statement includes high achieving medical students (MSs) like Danielle. Moreover, feelings of shame reflect a valuation of self (Brown, 2012; Fishkins, 2016; Tangney & Dearing, 2004). Unfortunately, distorted valuations may lead to maladaptive responses to feelings of academic shame. As Danielle's story depicts, shame may make an individual want to "deny, hide, or escape the shame-inducing situation" (Tangney, Stuewig & Mashek, 2007, p. 6). When not addressed, feelings of academic shame leave bright students like Danielle, feeling as though they are simply not *good enough* for medical school.

Chapter 1 introduces this action research (AR) study by providing a background on shame culture. Next, it provides details of the context in which the research was conducted. In addition, this chapter introduces a brief rationale for the study and summarizes the informing cycles of this project. Finally, this chapter provides the purposes of this AR study, as well as two guiding research questions (RQs).

Background on Shame Culture

Shame Culture in the United States

For the purpose of this AR study, shame was defined in two ways. First, shame is "the intensely painful feeling or experience of believing that we are flawed and therefore unworthy of love and belonging" (Brown, 2012, p. 69). Second, feelings of shame reflect a valuation of self (Brown, 2012; Fishkins, 2016; Tangney & Dearing, 2004). This

blended definition encapsulates the agonizing feeling associated with this internal visceral valuation.

Brené Brown, a leading researcher on the arena of shame in the United States (US) described *scarcity* as a form of fear-based thoughts (Brown, 2012). According to Brown (2012), “Scarcity is the ‘never enough’ problem” (p. 26). Moreover, she asserted that scarcity is present within the culture of the US and suggested it sounds like “never good enough. Never perfect enough. Never thin enough. Never successful enough. Never smart enough. Never certain enough. Never safe enough. Never extraordinary enough” (Brown, 2012, p. 25). This way of thinking is damaging to oneself (Brown, 2012). Brown (2012) claimed, “We get scarcity because we live it” (p. 25). Otherwise stated, this way of thinking can be found everywhere. In addition, this scholar asserted scarcity can take root “in shame-prone cultures that are deeply steeped in comparison and fractured by disengagement” (Brown, 2012, p. 27). Pointedly, feelings of shame are an element of scarcity and thus closely connected to this way of thinking (Brown, 2012). Because shame is an intrinsic emotion, it has the potential to influence all aspects of the human experience, including one’s educational endeavors. According to Brown (2012) shame may make an individual feel as though they are simply “not good enough” (p. 61). This feeling, as illustrated by Danielle’s story, is very powerful and has implications for an individual’s thoughts and behaviors. Sadly, Danielle continued to struggle with her wellbeing as she continued her journey in medical school. According to Sanderson (2015), a psychology educator, there is a clear connection between feelings of shame and a host of possible challenges tied to one’s mental wellbeing.

Shame Culture in Higher Education

The connection between mental health and shame should be of concern for all who work at a college or university. Although mental health issues are thoroughly researched, reluctancies in help-seeking exist within these settings (Furr, Westefeld, McConnell, & Jenkins, 2001). For example, suicide remains a prevalent cause of death among post-secondary students (Turner, Leno, & Keller, 2013). Unfortunately, a stigma has persisted within higher education systems around mental health (Carmack, Nelson, Hocke-Mirzashvili, & Fife, 2018). To complicate matters, stigma and feelings of shame often go hand in hand (Carmack et al., 2018). Furthermore, the stigma around mental health may only lead to more feelings of shame (Sanderson, 2015). When college students develop maladaptive coping strategies, there are profound consequences.

Shame Culture in Medical Education

The concerns around mental health and maladaptive coping strategies do not go away in advanced educational settings. According to medical educators, Miller and McGowen (2000), “physicians become masters at delayed gratification” (p. 971). In their preparation as future physicians, individuals often develop task-focused mindsets as a response to the rigors they encounter (Miller & McGowen, 2000). Moreover, MSs may adopt various “coping strategies, some of which are not always effective in dealing with environmental stressors and may potentially comprise psychosocial functioning” (Wolf, 1994, p. 13). Unfortunately, suppression or other faulty coping strategies may lead to an inability to respond to feelings of shame in adaptive ways. When not addressed in healthy manners, feelings of shame can spiral into feelings of worthlessness and depression, anxiety, and even self-harm in MSs. MS suicides are prevalent at considerably higher

rates than in general population comparisons (American Medical Student Association, 2017). Several studies underscore the influence of the rigorous demands placed on MSs. For example, in 2007, a study was conducted across multiple medical schools and revealed that 82% *(n* = 1846/2246) of these study participants experienced distress as defined by this study, such as depression, or feelings of burnout (Dyrbye et al., 2011). This study emphasizes the prevalence of hardships experienced by MSs.

These types of experiences may elicit, reinforce, or exacerbate feelings of academic shame as defined by this AR study. The high demands of medical school may intensify this feeling when MSs do not perform as well as they believe they should be in their academic endeavors. In addition, MSs may believe they are not performing as well as their peers. As a response to this perception, MSs may experience feelings of shame related to their academics. Regrettably, ignoring this feeling or responding to it in maladaptive ways may lead to depression or burnout, which in turn may increase feelings of shame and feeling of not being good enough as a MS. In short, shame and maladaptive responses to this feeling may create a vicious and self-damaging cycle for MSs.

Unfortunately, little research exists on how MSs experience feelings of shame in medical school (Lindström, Hamberg, & Johansson, 2011). However, their qualitative study that involved 75 MSs provided some insight on the nature of this phenomenon in medical education (Lindström et al., 2011). Several interesting findings emerged from the analysis of the MSs' essays reviewed in their study. For example, these MSs had some difficulty with identifying or labeling experiences as shame triggering. However, the study revealed that once these MSs had the space to reflect, they were able to label these past situations as shaming. These researchers noted that the MSs' experiences could be

categorized by similarities, such as feeling exposed in some way. It is important to note that these feelings of shame were often tied to ranking and power-related dynamics (Lindström et al., 2011). In summary, this study provided some understanding on how MSs may experience feelings of shame in medical education.

During the course of this AR project, several new studies emerged that helped shed additional insight on this action researcher's problem of practice. In 2019, a phenomenological study was published online that explored how 12 medical residents (MRs) experienced feelings of shame (Bynum, Artino, Uijtdehaage, Webb, & Varpio, 2019b). For example, their study revealed a range of adaptive and maladaptive responses to varying shame triggers experienced by these MRs (Bynum et al, 2019b). In addition, a survey study was published that involved 169 first-year medical students (MS1s) that examined several phenomena, such as feelings of shame and the imposter syndrome (Hu, Chibnall, & Slavin, 2019). This study's findings underscored the relationship between feelings of shame and challenges in mental wellness (Hu et al, 2019). These researchers called for investigations to guide future efforts that would help foster mental wellness in MSs (Hu et al, 2019). Finally, another study was published that discussed the findings of such an educational innovation focused on shame (Bynum et al., 2019a). This educational innovation was designed and coordinated by the investigators. Participation in the innovation included 113 second-year medical students (MS2s) (Bynum et al., 2019a). To assess the effectiveness of their educational innovation, "a pre/post retrospective questionnaire" was utilized (Bynum et al., 2019a, p. 1133). The study revealed several promising findings, such as perceived changes in regard to these MS2s' ability to better recognize feelings of shame (Bynum et al., 2019a).

In summary, these more recent studies underlined the timeliness and bearing of this action researcher's investigation. In particular, the seminar designed by Bynum, Adams, and compatriots (2019a), underscored the value of providing MSs with an educational innovation focused on shame and resiliency to that feeling. In other words, their findings confirmed the feasibility of this type of innovation and reinforced the conclusions of the earlier cycles of this AR project. Finally, these studies corroborated that this action researcher's problem of practice extended beyond his local context.

Study Context

Setting

This action researcher has been employed at a college of medicine (COM) at a large state university, situated in an urban area of a large city in the southwest. A total of 323 MSs were enrolled in the COM during the study period. The average age of these MSs upon matriculation was 24 (min 21, max 38). Of these 323 MSs, 57% identified as female and 43% identified as male. In addition, 75% of these MSs were in-state residents, while the remaining 25% were out-of-state residents. Of this population, 17% were considered underrepresented (African American, American Indian or Alaskan Native, Mexican/Chicano/Hispanic/Latino, Native Hawaiian/Pacific Islander) in medicine. Finally, 32% of these MSs were first generation to go to college and 48% of this population came from low-income and working-class backgrounds. The program of study at the COM was four years and upon completion of the degree program MSs earn a doctorate in medicine (MD). First-year medical students are known as MS1s, second-year medical students are known as MS2s and so on. Since its inception, the COM has had unique structural differences in operations, practices, staffing, and curricular design when

compared to many other medical schools. The COM prides itself on being focused on students' success, a place where MSs thrive in a community of learners who emphasize supportive learning environments over competition for the highest grade. For example, faculty does not know exam grades by student name. The information is de-identified. Only the staff in Student Development (SD), specific staff within Student Affairs (SA) and Academic Affairs (AA) have access to this privileged data. The goal for this anonymity policy is to create an unbiased, non-judgmental, and non-competitive environment. This policy is coupled by the internal messaging that help-seeking is not just encouraged, but rather expected as a habit of successful MSs. When deciding where to attend school, MSs often share that they chose this medical school because of its culture. In short, MSs' learning and success drive decision making at the COM.

Another point of pride is the curriculum design. The first two years of medical school at the COM are defined as the pre-clinical. During this time, MS1s and MS2s complete nine academic blocks (courses) focused on the basic sciences of medicine. Although many medical schools follow a similar model, this curriculum at the COM is a compressed, integrated basic science and clinical knowledge design and therefore not taught in a traditional discipline-specific approach. For example, students learn about integrated biological systems that provide a better holistic view of human health, rather than silo-ing knowledge into areas such as biochemistry, physiology, anatomy, and genetics. In addition to the academic blocks focused on medical knowledge, these MSs engage in clinical experiences starting in their first weeks of medical school, within the metropolitan and rural communities. They continue immersed clinical experiences during third-year clerkships and fourth-year elective rotations at local hospitals, with options for

rotations in another city or state. In many medical schools, a MS may not have these patient care experiences until years three or four. In addition, MS1s and MS2s are also required to complete a two-year long course called Doctoring, in which they apply the new medical knowledge they are learning, practice procedural skills, as well as develop communication skills used in a clinical setting. For example, students conduct interviews and perform common physical exams on standardized patients (actors) and receive immediate feedback from an observing medical doctor and the "patient." In short, MSs navigate unique and challenging academic and clinical learning experiences.

Given the complexity of training environments and learner needs, the COM has developed a range of services and resources for MSs, such as this action researcher's role as a learning specialist in SD. This unit is housed in SA, which is composed of an associate dean, director of operations, registrar, credential coordinator, alumni and student engagement coordinator, wellness programming director, a financial aid team, a professional and career advisor team, and support staff. More specifically, SD is comprised of three learning specialists and a director. At the start of a new academic year, every incoming MS is assigned to a learning specialist. Collectively, the learning specialists have the privilege to hear more MSs' narratives than any other position on the campus. This unique relationship begins in the first year and continues to develop over the course of the student's journey through medical school.

Problem of Practice

The intensity and high stakes nature of medical school regularly elicits feelings of *not being good enough* in MSs. The crux of this problem of practice is that of a the human emotion: shame. As noted, in conversations with MSs, these visceral valuations

are often expressed as not feeling good enough for medical school, not smart enough for a specialty area, not having it all together like his or her classmates, or feelings of having to be perfect at everything. These conversations are reflective and characteristic of "shame tapes – the messages of self-doubt and self-criticism that we carry around in our heads" (Brown, 2012, p. 66). Put differently, if the standard is *perfect* and if MSs are not meeting this standard, then something must be wrong with them. Within his practice, this action researcher regularly heard MSs express concerns about their academics. Although these scripts vary, they often sound like, "I am not sure if I am really supposed to be here" or "I should be able to figure this out on my own, what's wrong with me?"; or "Why is this happening to me? My classmates are not struggling as much"; or "I don't think I am good enough for that specialty." Furthermore, this action researcher observed MSs respond maladaptive to experiences triggered by their academic experiences. For example, Kevin was upset with his academic performance throughout the first two years of medical school. He would regularly state that he was not performing "good enough" for the specialty he desired. During this time, he blamed the integrated curriculum and instructional style of the faculty at the COM. At the same time, Kevin refused to meet with his faculty or use other resources like tutoring or counseling. Kevin continued to express his anger and frustration with the COM as he moved through the curriculum and continued to struggle during years three and four. Similarly, David, a MS2, was struggling in preparing for his first board exam. Although his learning specialist encouraged him to utilize the academic resources available to him and follow through with a specific plan of study, David did not follow through with these recommendations. Meanwhile, he spent a lot of time avoiding studying and withdrawing from interactions

that would prompt him to reflect on his thoughts and feelings. Regrettably, it was not until after he failed his board exam that he was willing to talk about how he was feeling and to use resources. In this later conversation with David, he admitted that he doubted his abilities and was not sure if he was "good enough" to be a medical doctor. Unfortunately, these types of student experiences occurred all too frequently at the COM.

Despite the SD team's efforts to provide a safe place for MSs to talk about their experiences, thoughts, and feelings, the persistent inability to respond to feelings of academic shame in adaptive ways may still negatively impact a MS's mental health, academic performance, degree completion, and ultimately their future work as a physician. To complicate matters, feelings of shame can be tied to the challenges around help-seeking behaviors in MSs (Chew-Graham, Rogers, & Yassin, 2003). Ironically, Brown (2012) asserted that "reaching out" to others is a critical aspect of shame resilience (p. 75). In other words, help-seeking is a form of reaching out, and is one aspect of responding to feelings of shame adaptively as defined by this study.

Unfortunately, current practices at the COM did not acknowledge the environmental, cultural, and professional demands that may elicit feeling of shame related to academics. As such, an educational innovation was required to pose an alternative pathway for MSs to respond to feelings of academic shame more adaptively. This change in practice consisted of creating opportunities for MSs to learn about shame and different responses to this feeling. Next, the change included experiences to normalize feelings of academic shame at the COM. Finally, opportunities to learn about and practice this pathway in a safe learning community were also provided.

The stakes are high for all those involved. Various reports and the literature reveal an impending deficit of physicians and concern for these professionals in the US. For example, according to the Association of American Medical Colleges (2016), "Projections show a shortage ranging between 61,700 and 94,700, with a significant shortage showing among many surgical specialties" (para 1). Moreover, Miller and McGowen (2000) asserted that "each year, it would take the equivalent of 1 to 2 average-sized graduating classes of medical school to replace the number of physicians who kill themselves" (p. 967). There is no question that the practice of medicine is challenging. Larger innovations are needed to impact the cultural and professional expectations deeply rooted in medical education and the field of medicine. However, changes integrated on the front end of medical school may promote the ability for these future physicians to embrace adaptive responses to feelings of shame and encourage help-seeking behaviors.

Early Reconnaissance

Cycle 0 was an exploratory phase and served as a formal reconnaissance for the identified problem of practice. This cycle was conducted during the fall of 2017. The purpose of this initial small-scale study was to better understand the perceptions of faculty and staff on how MSs experience vulnerability and feelings of shame at the COM. For Cycle 0, semi-structured interviews were conducted with faculty and staff members at the COM ($n = 3$). More specifically, a faculty member who was also a medical doctor, a contracted clinical psychologist who worked in a practitioner role at the COM, and another learning specialist were interviewed. In each case, these faculty and staff members had opportunities to hear student narratives within their given roles. The semi-structured interview questions were written by this action researcher. Upon collection of

the study, all interviewees were provided the opportunity to review his or her respective transcript to help ensure the accuracy of the data. The data were analyzed by this action researcher. In summary, initial codes were first generated by the action researcher and then organized into similar categories. The underlining approach used for the coding and theming process was a constant comparative analysis (Strauss & Corbin, 1998).

Findings. The analysis of this qualitative data uncovered four salient themes. First, MSs may experience a range of shame triggers. Although, shame triggers may be different for each MS, some experiences may be anticipated as more common triggers in medical school. The study participants identified both academic and non-academic experiences that MSs may experience on a high level of frequency while in medical school, such as scores on exams and social situations with peers. In addition, each of the study participants described how these potentially shame-triggering experiences may elicit a valuation of self. In other words, it was perceived that MSs may compare themselves with others, or even an ideal image of what they believe a MS should be. As a response to this valuation of self, study participants noted that MSs respond in a variety of maladaptive ways. At times, these responses are overt, such as overcompensating in an area or trying to perfect an area of their life, while other times MSs exhaust their energy by hiding their feelings of shame. Finally, the study participants identified strategies and factors that help MSs respond to shame in adaptive ways. This finding was particularly relevant as they supported the idea that adaptive responses to shame can be both developed and fostered at the COM.

Additional Reconnaissance

The following summarizes additional reconnaissance work conducted for Cycle 0. As noted, Cycle 0 launched the initial exploration of this problem of practice, which was focused on how MSs experience and respond to feelings of shame. For example, MSs often hold the belief that if they are unable to handle medical school without help, they must *not be good enough*. As noted, help-seeking is a form of reaching out as defined by this AR study. As such, this action researcher wanted to look more closely at the relations between shame and help-seeking behaviors. Due to the compelling connections between these phenomena, the director of SD was interviewed due to her expertise of help-seeking and understanding of the challenges encountered by MSs at the COM. Continuing the constant comparative approach, the findings of this data were organized into themes and then into theme-related groupings (Strauss & Corbin, 1998).

Findings. This additional reconnaissance work revealed four major themes. First, data suggested that MSs may experience a range of shame triggers, which was consistent with the findings of the initial interviews. Second, this data also suggested how comparison or feelings of not being good at everything may reinforce feelings of shame. Third, this data also illustrated the connection between help-seeking and shame. Yet, perhaps more importantly, two of the themes that emerged suggested agency in response to feelings of shame, through learning about this feeling and practicing adaptive responses, including help-seeking. These findings were complementary with the initial reconnaissance work, which suggested that there were identifiable strategies and factors that help MSs to respond to shame in adaptive ways.

In conclusion, it was not the purpose of this reconnaissance work to develop broad and generalizable conclusions, as the sample was intentionally small. However, the analysis utilized a "grounded interpretive approach" in which interpretations of the data were established based on the data (R. Buss, personal communication, Mar. nn, 2018). In short, these findings supported the assertion that a change in a practice to foster adaptive responses to academic shame in MSs is a worthwhile endeavor at the COM.

Purpose of this Study

Recall that feelings of shame affect us all (Brown, 2012). As noted, MSs are no exception to this assertion. For example, academic performance is routinely measured in academic blocks (courses), as well as through diagnostic instruments in medical school. MSs often wonder how they “measure up” compared to their peers. Similarly, high-stake board exams such as the United States Medical Licensing Examination (USMLE), Step 1, invoke questions in MSs such as “Do I know enough to pass?” or “If I do pass, will I have a *good enough* score for the specialty I want?” These self-assessing questions reflect the presence of a potential shame trigger. In addition, rigorous formative and summative feedback is provided to MSs regularly through clinical skills assessments. Although feedback is central to learning in medical school, many MSs have little or no experience with the depth of feedback and demands they will encounter in this unique academic setting. In other words, the high stakes and high demands of medical school present frequent experiences that may elicit feelings of academic shame. For MSs, maladaptive behaviors to this feeling may result in challenges with mental health, academic performance, and degree completion. Therefore, the purpose of this AR study’s Academic Shame Response Training (ASRT) was to help MS2s normalize feelings of

shame related to academics and to respond to these feelings in more adaptive ways. In other words, the ASRT focused on cultivating awareness and understanding of shame and introducing new skills focused on adaptive responses to feelings of academic shame. As such, the purposes of this concurrent mixed-methods study were to determine to what extent does MS2s participation in the ASRT influence their (a) understanding of shame, (b) perception of their self-efficacy in regard to shame resiliency practices; (c) intention of engaging in help-seeking behaviors; and (d) to understand how MS2s respond to feelings of shame related to academic performance before and after participation in the ASRT. The following research questions guided this AR study.

Research Questions

- RQ1: To what extent does participation in an ASRT influence MS2s' (a) understanding of shame, (b) perception of their self-efficacy practices in regard to shame resiliency, and (c) intention of engaging in help-seeking behaviors?
- RQ2: How do MS2s respond to feelings of academic shame during their medical education before and after participation in an ASRT?

Informing Cycles of Research

This section provides a summary of two earlier cycles of research that informed the development of Cycle 3 of this AR study. Cycles 1 and 2 guided the formation of the RQs, as well as the creation of an educational innovation. Table 1 provides a brief overview of the earlier reconnaissance cycle, as well as, Cycles 1 and 2 introduced in this section. More specifically, the table provides an explanation of how it informed the following cycle. Fuller descriptions of each cycle, including findings, an explanation of and complementarity data, influences on practices, and conclusions are provided.

Table 1

Summary of Action Research Concurrent Mixed-Methods Design and Process

Cycle	Purpose and research questions	Methodology and methods	Key findings	Actions for the next cycle
Cycle 0, Fall 2017	Primary purpose/s: Confirm presence of problem of practice. RQ1: In what ways faculty and staff perceive how MS1s and MS2s practice vulnerability? RQ2: In what ways do faculty and staff perceive MS1s and MS2s experience shame?	*Qualitative*; conducted semi-structured interviews of faculty and staff for reconnaissance.	Faculty and staff confirmed presence of problem of practice.	Conduct further reconnaissance with an emphasis on its connection to help-seeking.

Table 1 continued on next page

Table 1 (continued)

Summary of Action Research Concurrent Mixed-Methods Design and Process

Cycle 0, Spring 2018	Primary purpose/s: Explore the relationship between vulnerability, help-seeking, and shame. Gather additional reconnaissance data. RQ1: From your perspective and research, how would you describe the relationship between vulnerability and help-seeking? RQ2: What feelings or experiences do MS1s and MS2s have that may make them feel shame?	*Qualitative*; conducted semi-structured interview of a staff member/researcher who studied help-seeking behaviors.	Staff member confirmed presence of problem of practice, as well as its connection to help-seeking behaviors.	Pilot a small innovation; collect quantitative and qualitative data from MS2s to further explore lived experiences.

Table 1 continued on next page

Table 1 (continued)

Summary of Action Research Concurrent Mixed-Methods Design and Process

Cycle 1, Spring 2018	Primary purpose/s: Focus scope of the study on MS2s, confirm problem of practice with students, and pilot a change in practice through the creation of an innovation.	*Mixed-methods*; piloted the innovation, conducted semi-structured interviews, collected pre- and post-survey data on the influence of the innovation.	MSs further confirmed presence of the problem of practice and discussed experiences that trigger feelings of academic shame and described different responses to this feeling. Confirmed viability of the innovation.	Collect additional quantitative data via survey instrument to support the final cycle of this study's focus on feelings of academic shame in MS2s; compare these findings with Cycle 0 and Cycle 1; field test the survey instrument prior to dissemination.
Cycle 2, Fall 2019	*Quantitative*; collect survey data on MS2s.	Primary purpose/s: Gather data to understand the types of academic experiences that may elicit shame and to learn how MSs respond. RQ1: What types of academic related experience elicit feelings of shame? RQ2: How do MS2s respond to feelings of academic shame?	Data confirmed the presence of academic shame triggers. Data suggest the presence of a range of maladaptive responses.	Utilize these findings to focus the development of the ASRT for Cycle 3. Normalize common shame triggers and responses to feelings of academic shame.

Table 1 continued on next page

Table 1 (continued)

Summary of Action Research Concurrent Mixed-Methods Design and Process

Cycle 3, Summer - Fall 2019	RQ1: To what extent does participation in an ASRT influence MS2s' (a) understanding of shame, (b) perception of their self-efficacy practices in regard to shame resiliency, and (c) intention of engaging in help-seeking behaviors? RQ2: How do MS2s respond to feelings of academic shame during their medical education before and after participation in an ASRT (d)?	*Mixed-method;* conduct the innovation, collect pre- and post-innovation survey data, conduct post-innovation semi-structured interviews, collect post-innovation student journals prompts.	Finding presented in Chapter 4 and discussed in Chapter 5.	Finding presented in Chapter 4 and discussed in Chapter 5.

Cycle 1

The following summarizes Cycle 1 of this AR study, a mixed-methods study, which was conducted in March of 2018. Cycle 1 explored MS2s' understanding of shame, as well as their perceptions of their self-efficacy of shame resiliency. In addition, Cycle 1 provided the opportunity to test a small-scale innovation composed of two

workshops that were developed during several months prior to their delivery. These data were compared with the Cycle 0 findings and guided future cycles. Because Cycle 1 was a pilot, a short pre- and post-innovation survey instrument was used to assess the effectiveness of the workshops along with post-interviews of several of the study participants. A purposeful sample was used, meaning the study participants were selected intentionally (Plano-Clark & Creswell, 2015). More specifically, a small sample ($n = 13$) of the current MS2s was used due to availability and to narrow the focus of the study.

Findings. The analysis of the quantitative data from the pre- and post-innovation surveys, which measured the sub-components of *knowledge of shame* and perceptions of *self-efficacy in shame resiliency,* was found to be significant at $p < 0.05$. The internal reliability of the instrument's scales as measured by Cronbach's Alpha was .80 or higher, which exceeded acceptable ranges of internal reliability (George & Mallery, 2003). The analysis of this qualitative data revealed five major themes ($n = 5$). The first theme suggested that the study participants *acknowledged that the culture of medical education reinforces feelings of academic shame*. In short, these MS2s recognized that feelings of shame were not openly talked about in medical school. In addition, the study participants discussed the competitive nature of the MS population, often describing themselves as Type A personalities. The study participants also provided examples of behaviors they have seen from themselves or their classmates such as comparison and perfecting. The second theme indicated that the study participants *learned about the anatomy of shame.* In other words, these MS2s were able to define and elaborate on the differences between shame and other emotions and provide examples after participating in the workshops. For example, some study participants recognized the feelings of shame, but they did not

know what to label it and they certainly did not talk about it with others. The third theme suggested that study participants *valued the opportunity to reflect on and discuss shame*. In short, the workshops provided the space to have the conversation about a feeling that is ignored or simply not acknowledged. The fourth theme suggested that study participants were able to *recognize and label their different responses to feelings of shame as either adaptive or maladaptive* after participating in the workshops. Finally, the fifth theme reflected that these MS2s *understood that shame resiliency can be learned and fostered*.

Explanation of and complementarity data. As noted, the sub-components of *knowledge of shame* and *self-efficacy in shame resiliency practices* as measured on the pre- and post-innovation surveys had a statistically significant difference (.05 or lower). These data suggested that the learning outcomes for the workshops were worthwhile and attainable. In addition, these findings suggested that the workshops were a viable format for providing knowledge of shame and fostering shame resiliency in MS2s. The qualitative data was complementary of the survey findings, as participants noted the value of having the space to reflect and discuss shame. The fast-pace and high demands of medical school learning may provide little to no space for this type of self-reflection and learning about this powerful emotion. As the literature on shame suggests, feelings of shame are something individuals would rather not talk about (Brown, 2012). As such, it was not surprising to see a reluctance in talking about shame as being present in medical education. The workshops created space for MSs to develop a deeper understanding of shame and its influence. Moreover, the qualitative data further demonstrated the viability of this innovation in the form of educational workshops.

Yet perhaps more importantly, the data suggested MSs can learn more about shame and they simultaneously saw the value in doing so as was reflected in Themes 2, 3, 4, and 5. These themes and their supporting evidence demonstrated that study participants understood the connection between shame and mental health. This relationship is supported by the literature which asserts that feelings of shame can be damaging and associated with various challenges related to mental wellness (Sanderson, 2015; Tangney et al., 2007). These MS2s recognized that maladaptive responses develop early in medical school and the environment is an ideal setting for feelings of shame to manifest.

The fifth theme suggested that participants can learn these concepts in the setting of educational workshops. In addition, the data suggested that even cultivating awareness about shame is a critical step forward in fostering adaptive responses. Similar to the study published in 2011 conducted by Lindström and compatriots, several of these MS2s did not identify feelings of shame until they were given the space to reflect. The data also suggested that the participants understood that shame resiliency is a *practice*. In other words, while the conceptual understanding can be learned through an innovation like these educational workshops, MSs must continually apply this knowledge when they experience feelings of academic shame. This theme is consistent with Brown's work on shame, which contends that individuals cannot simply develop an insusceptibility to feelings of shame (Brown, 2012). In conclusion, Cycle 1 data suggested that these MS2s increased their knowledge of shame and awareness about shame triggers, were willing and valued the opportunity to reflect and talk about shame when they were provided the space, and finally, were equipped with the language to label feelings of shame as such.

Influence on practice. As noted, the development of shame resiliency is critical for supporting the short-term and long-term success and well-being of MSs. The findings suggested that the application of Brené Brown's research to inform these workshops was both a practical and a meaningful way to approach the development of this educational innovation. In addition, the findings suggested an openness to engage in the type of work facilitated through the participation in the workshops. In particular, the qualitative data highlighted that the study participants appreciated having the space for this type of reflection and self-work. Although levels of MSs' interest in the topic was an early concern of this action researcher, these findings alleviated this potential challenge for the delivery of the educational innovation

Cycle 1 was a particularly exciting opportunity for this action researcher. In short, hearing these MS2s acknowledge the existence of the problem of practice confirmed the need for this AR study. The greatest "ah-ha" moment in the process came from unsolicited feedback from several of the study participants who said that the workshops were "new content" and affirmed that this feeling was not being talked about at the COM. Second, several of the study participants reinforced the value of the *active learning* nature of the workshops, which included a visualization activity, group and partner work, experiential activities, reflective time, and videos. In short, these MS2s did not want another lecture or discussion. Simply put, it was not just the content, but also the format of the workshops that these study participants appreciated.

Conclusion. The findings of Cycle 1 supported the assertion that the development of shame resiliency practices were both possible and worthwhile endeavors. Even though Cycle 0 offered conclusions based on the perspectives and interpretations of faculty and

staff, Cycle 1 explored MS2s' understanding of academic shame and perceptions of their self-efficacy of shame resiliency. The findings of Cycle 1 were complementary of the data collected in Cycle 0. Finally, Cycle 1 findings supported the notion that shame resiliency can be learned and practiced by MSs within the context of the proposed educational innovation.

The following section summarizes Cycle 2 of this AR study, which more closely examined academic shame triggers and responses to feelings of academic shame initially revealed in the preceding cycles. In short, this action researcher wanted to gain further insight in these focused areas as the development of Cycle 3 was underway.

Cycle 2

Cycle 2 of this AR study was conducted during the fall of 2018. The purpose of this cycle was to collect additional data to better understand MS2s' perceptions of shame triggers related to their academics, as well as responses to feelings of academic shame. Moreover, the findings of this investigation were used to further develop the ASRT. A short survey instrument was utilized for the collection of this additional exploratory data. The instrument was designed by this action researcher and field tested prior to its dissemination in this cycle. The overall coefficient alpha of the instrument was $\alpha = .90$, suggesting a high internal reliability of the instrument (George & Mallery, 2003) during the field-testing phase. Furthermore, the internal reliability of the instrument's scales as measured by Cronbach's Alpha was .80 or higher, which exceeded acceptable ranges of internal reliability (George & Mallery, 2003). Due to the smaller sample size of this study, a factor analysis was not performed to further examine the validity of the latent sub-components developed and examined by this action researcher.

Part one of the survey instrument focused on academic related experiences that may elicit some level of shame in MS2s. The level of or intensity of this feeling did not matter, only that the MS2s believed they have or might feel it based on that given scenario. The following five-point Likert scale was used for participants to record their response: 1-*very little or none*; 2-*some* (more than "a little"); 3-*moderate* (more than "some"); 4-*a lot* (more than "moderate"); and 5-*very much* (more than "a lot"). The sub-component of *being directed* referred to a MS2 being told to meet with someone for the purpose of improving their academic performance, such as a faculty member, tutor, or learning specialist. The *performance* sub-component focused on achievement on exams in relationship to items such as their expectations of self, comparison to others, or beliefs about future goals. The sub-component of *negative feedback* referred to receiving feedback from a peer, faculty, or staff member on campus. These sub-components were identified from the findings of Cycle 1 of this study. The second part of the survey instrument focused on responses MS2s may have as to feeling shame related to their academics. Study participants were asked to indicate the likelihood that feeling academic shame would elicit the stated response. In addition, the study participants were reminded that responses to this feeling often vary from situation to situation, so they were asked to respond based on their experiences. As such, the hypothesized sub-component of responses to feelings of academic shame was examined. Again, the findings of Cycle 1 informed the development of the items used to measure this sub-component. The following six-point Likert scale was used for participants to record their response: 1: *definitely not;* 2: *probably not;* 3: *possibly not;* 4: *possibly;* 5: *probably;* and 6: *definitely*. Items in each area measured the likelihood that participants may respond to the feelings

of shame in that way. One open-ended question was included at the end of each part of the survey to capture other academic triggers or responses to feelings of academic shame not specified on the instrument.

A convenience sample was utilized for Cycle 2, in an effort to collect as many responses as possible from the current population of MS2s. In short, this action researcher emailed these MS2s (n = 80) inviting them to participate in the study. A total of 36 MS2s responded to the survey instrument over a two-week period, which was the equivalent to a 45% response rate. During the analysis of this survey data, it was determined that the overall coefficient alpha of the instrument was $\alpha = .88$, suggesting a high internal reliability of the instrument (George & Mallery, 2003).

Findings. This section highlights several findings of the survey data. As noted, the first sub- component examined was *being directed*. MS2s reported that being directed to meet with a block director, a dean/associate dean, or a professional and career advisor would elicit feelings of academic shame. More specifically, 64% of the study participants reported that they would feel *a lot* (rating 4) or *more than a lot* (rating 5) of academic shame if being directed to meet with a dean or associate dean. Moreover, 45% of the study participants reported that they would feel *a lot* or *more than a lot* of academic shame if being directed to meet with a block director, the faculty member that oversees the academic block (course). In addition, 25% of the study participants reported that they would feel *a lot* or *more than a lot* of academic shame if being directed to meet with a professional and career advisor or tutor. The next lowest ranking area was meeting with a teaching faculty member at 19.5% as measured by the two highest Likert scale rankings.

In contrast, only 8% of the study participants reported that they would feel *a lot* or *more than a lot* of academic shame if being directed to meet with a learning specialist.

In terms of the *performance* sub-component, the three highest scoring areas that would invoke feelings of academic shame were performance on Step 1, performance for a desired specialty, and performance in comparison to a close friend. More specifically, 75% of the study participants reported that they would feel *a lot* or *more than a lot* of academic shame if they did not perform as well as they wanted to on Step 1. Similarly, 53% of the study participants reported that they would feel *a lot* or *more than a lot* of academic shame if they did not perform as well as they would like for a desired specialty. Finally, 33% of the study participants reported that they would feel *a lot* or *more than a lot* of academic shame if they did not perform as well as a close friend. In contrast, performance on block exams, doctoring experiences, and comparison to classmates were less likely to elicit feelings of academic shame in these MS2s.

The final sub-component in part one of the survey was *negative feedback*. The findings on the survey instrument revealed that the three highest scoring areas for receiving negative feedback from someone that would invoke feelings of academic shame were from a community mentor, dean or associate dean, and classmates or a close friend. More specifically, 94% of the study participants reported that they would feel *a lot* or *more than a lot* of academic shame if they received negative feedback from a community mentor. The second highest ranked area was negative feedback from a dean or associate dean at 72% as measured by the two highest Likert ratings. Finally, 43% of the study participants reported that they would feel *a lot* or *more than a lot* of academic shame if they received negative feedback from a classmate or a close friend. In contrast,

the data suggested that tutors, learning specialists, professional and career advisors, and doctoring faculty were less likely to invoke feelings of academic shame as it relates to receiving negative feedback from these individuals.

Part 2 of the survey instrument examined responses to feelings of academic shame. As noted, study participants recorded their responses on the following scale: 1: *definitely not;* 2: *probably not;* 3: *possibly not;* 4: *possibly;* 5: *probably;* and 6: *definitely*. Over half of the study participants ranked their responses as a 5 *(probably)* or 6 *(definitely)* on the following items: wondered if they are working hard enough, wondered if they are going to be a "good" medical doctor, wondered if they are going to be "good enough" for a specialty, questioned their current decisions, and questioned their intelligence. Nearly 50% of the respondents also wondered if they were the only ones feeling this way, as measured by the two highest rankings of 5 (probably) or 6 (definitely) on the Likert scale. It is important to note that 75% of the study participants, as measured by the two highest Likert scale ratings, wondered if they were working hard enough, while 64% wondered if they were going to be a "good" doctor.

Explanation of and complementarity data. The Likert scale items on this survey supported the assertion of the presence of variety of academic shame triggers. In addition, the opened-ended question related to Part 1 of the survey illustrated the range of other academic triggers, such as having less research experience in comparison to peers, not meeting academic or study goals, falling behind in Step 1 studying, and relationships with classmates. Even though these academic shame triggers varied, some triggers, such as performance on Step 1 or performance as it relates to a desired specialty, were shared by MS2s as captured on this survey. Similarly, being directed to meet with individuals in

positions of assessment or authority, such as a dean /associate dean, community mentor, or block director were more likely to elicit feelings of academic shame. However, it is important to note that classmates and even close friends may elicit feelings of academic shame, as it relates to comparison in performance or negative feedback.

Part 2 of the survey instrument revealed that MS2s are likely to question their ability, intelligence, and current decisions when experiencing feelings of academic shame. MS2s also shared a variety of other responses to feelings of academic shame on the open-ended question in part two of the survey, such as: overanalyzing, withdrawing, shutting-down, over-eating, avoiding studying, wasting time with Netflix or time online, getting depressed, and not seeking help. These responses are considered maladaptive in nature as defined by this AR study. Interestingly, *only three* of the 36 study participants reported behaviors that would be considered adaptive responses as defined by this study, such as seeking help or connecting with friends and family.

Influence on practice. Cycle 2 was particularly relevant for supporting the direction of this ongoing investigation. More specifically, this cycle marked the largest study conducted to date by this action researcher. As noted, the survey had a 45% response rate, which was nearly half the class of the current MS2s. These findings supported the interpretations of the previous cycles and provided additional clarity on the range and prevalence of academic shame triggers and responses to feelings of academic shame within this sample of MS2s. As such, these data were used to further focus the development of the ASRT and direction of Cycle 3. In other words, this cycle provided further clarification on this problem of practice.

Conclusion. The findings of Cycle 2 supported the presence of a variety of academic related shame triggers, as well as a range of maladaptive responses to this feeling. In summary the findings of Cycle 2 were supportive and complementary of Cycles 0 and 1. The collection of this data was informative for the design of the ASRT and provided examples of shame triggers and responses. The collection of these real-life examples were used to normalize these experiences through their integration in the ASRT

Chapter 1 introduced this AR study by situating it within a larger context of shame and describing the local setting. This chapter also introduced the problem of practice and RQs. Finally, this chapter summarized the smaller cycles of research that informed the progression of this study. Chapter 2 introduces relevant literature, research, theoretical models, and key constructs, and sub-components and terms.

CHAPTER 2

THEORETICAL PERSPECTIVES AND RESEARCH GUIDING THE STUDY

Shame is a soul eating emotion.
~ C.G. Jung

Chapter 2 begins with an introduction to a review of significant literature on shame within the scope of this AR study. More specifically, relevant literature is presented concerning negative self-talk, regarded by some as "shame's voice." Next, Chapter 2 defines and operationalizes the construct of shame, and distinguishes shame from other related emotions. Consideration for shame's relationship to perfectionism, the imposter syndrome, and medical education are explored. Chapter 2 also provides descriptions of two grounded theories for understanding shame, including an introduction of Brené Brown's shame resilience theory (SRT), which was informative in design of this AR study's educational innovation. Moreover, this chapter defines the core construct, sub-components, and terminology for this AR project.

The Nature of Shame

Negative Self-talk, Shame's Voice

The origins of self-talk are noted early on in human development (Fishkins, 2016; Geurts, 2018). According to Fishkins (2016), educator and psychotherapist, self-talk directly influences the self-perception of an individual's identity. This phenomenon is connected to primitive regions and functions of the human brain (Fishkins, 2016). Moreover, this endless inner dialogue is not always self-affirming; in fact, it can act in insidious ways (Fishkins, 2016). Unfortunately, Fishkins noted that darker narratives of self-talk are often imbued with harsh valuations of self. In other words, this type of self-

talk reflects feelings of shame (Fishkins, 2016). According to Fishkins (2016), "no one could ever be as cruel to us as we are to ourselves – not even close" (p. 19).

Internal valuations often involve two powerful human emotions: guilt or shame (Tangney & Dearing, 2004). Feelings of guilt or shame can be very confounding. In short, individuals may not know how these two feelings actually differ from each other (Tangney & Dearing, 2004). To complicate matters, individuals may shy away from conversations about feelings of shame all together (Brown, 2012; Tangney & Dearing, 2004). In fact, Tangney and Dearing (2004), two prominent shame and guilt researchers, suggested that the "U.S. society is 'shame-phobic'" (p. 11). Yet, despite this reluctance to discuss feelings of shame, it is something everyone experiences (Brown, 2012).

In summary, negative self-talk often gives voice to feelings of shame (Fishkins, 2016). Regrettably, no one is exempt to these darker narratives (Fishkins, 2016). Despite feelings of shame being a shared human experience, researching the emotion has inherent challenges (Tangney & Dearing, 2004). The following section provides clarity on how shame is defined and operationalized for this AR study and distinguishes shame from guilt and embarrassment and connects shame to related phenomenology.

Shame and Related Emotions

Shame

According to Sanderson (2015), the "word shame originates from the Teutonic root word 'skem,' which means 'to cover oneself,' which is a typical expression of shame. In parallel, the Old Norse word 'kinnrooi' means 'red-cheeked', as in the blushing associated with shame" (p. 20). The concept of shame has a complex and rich history, which has been studied by several disciplines including, "psychodynamic, cognitive, and

development perspectives" (Tangney & Dearing, 2004, p. 2). Tangney and Dearing (2004) described shame as a self-conscious emotion, a term they say portrays the valuation which is associated with the feeling. In addition, these scholars asserted that shame is also a moral emotion, which reflects a link to the regulation of behaviors (Tangney & Dearing, 2004). The social sciences have added to the evidence of the destructive effect this feeling can have on an individual. For example, Brown (2007) suggested that feelings of shame seldom lead to good things. Similarly, Tangney, Stuewig, and Mashek (2007) reminded us that shame can easily bring about maladaptive behaviors, as well as a variety difficulties related to mental wellness.

Brown (2012) asserted that feelings of shame are not just the result of profound hardships or traumatic life experiences, but rather the feeling can set root in common areas of an individual's life. Sanderson (2015) suggested that "persistent shame leads to future anticipation of shame in which each new shaming experience adds to the already huge vat of shame which constantly threatens to overflow and obliterate any sense of self" (p. 25). MSs who ignore feelings of academic shame, may end up in a reactive crisis mode. Often in these situations, MSs may need to take personal or medical leaves from school. Recognizing these feelings early on allows MSs to respond adaptively minimizing academic, personal, and financial consequences. As such, the scope of this AR study focuses on fostering adaptive responses to feelings of academic shame in MSs.

Recall, for the purpose of this AR study, shame was defined in two ways. First, shame is "the intensely painful feeling or experience of believing that we are flawed and therefore unworthy of love and belonging" (Brown, 2012, p. 69). Second, feelings of shame reflect a valuation of self (Brown, 2012; Fishkins, 2016; Tangney & Dearing,

2004). Fishkin (2016) added that shame is “an organic biological response that is expressed as visceral and not an intellectual reaction” (p. 22). This formidable feeling has implications for an individual’s ability to cope with the everyday demands of life, including personal, academic, and professional contexts. The following section further distinguishes feelings of shame from other emotions, such as guilt and embarrassment.

Shame vs. Guilt

Although overlapping connotations occur, shame is more precisely defined as a valuation of self, whereas guilt is a valuation of behavior (Fishkins, 2016; Brown, 2010). For guilt, this valuation is associated with an internal set of rules or expectations that an individual hold to be true (Fishkins, 2016). More specifically, Fishkins indicated that feelings of guilt occur when an individual experiences dissonance between his or her actions and values. In other words, these values inform a book of rules that the individual follows. Furthermore, Sanderson (2015) asserted that in this reflective process, the individual is aware that this valuation stems from one’s behavior. In this sense, one’s core being is not at jeopardy when an individual does not uphold a particular value or rule (Sanderson, 2015). Moreover, guilt can be very useful for one’s learning and inform more desirable future behaviors (Brown, 2007). Brown asserted that “the majority of shame researchers agree that the difference between shame and guilt is best understood as the differences between ‘I am bad’ (shame) and ‘I did something bad’ (guilt)” (Brown, 2007, p. 13). These nuances and the similarities lead to the confusion around these terms. Brown argued that “recognizing we’ve *made a mistake* is far different than believing *we are a mistake*” (2007, p. 14). The focus of this valuation process is clearly distinct as well as the impact it has on an individual.

Shame vs. Embarrassment

Shame can be quickly distinguished from embarrassment (Brown, 2012). Brown defined embarrassment as "something that is fleeting, often eventually funny and very normal" (2007, p. 13). In other words, the discomfort elicited from an embarrassing situation is relatively short-lived (Brown, 2007; Sanderson, 2015). Moreover, someone experiencing embarrassment may recognize the humanness of the fault (Brown, 2007). Such experiences are often accidental and are not directly tied to an individual's belief about themselves. In this sense, when compared to shame, feelings of embarrassment are more benign when experienced by an individual (Brown, 2007; Sanderson, 2015). This distinction between shame and embarrassment is easier to recognize.

Related Phenomena

The following section describes related studies that depict phenomenology closely connected to shame. These studies underscore the importance of this AR study, because there is little existing research that directly investigated this problem of practice within a medical school setting. The implication of each study is addressed in each sub-section.

Shame and Perfectionism

Within the first few days of medical school, MSs quickly learn of the demands and rigor of this academic and career path. To negotiate these expectations, MSs may begin to put off their own needs and develop nearly impossible self-expectations. According to medical educators Miller and McGowen (2000), there is an expectation that being a physician implies work without any error or difficulty. They also assert that these types of unrealistic expectations are "internalized by students of medicine" and reinforced by the field (Miller & McGowen, 2000, p. 967). More specifically, Miller and

McGowen (2000) claimed “the culture of medicine is one in which perfectionism and ‘workaholic standards’ rule the day” (p. 970). Yet, this way of being is not realistic (Miller & McGowen). Within the field of medicine, the national data on depression and suicide rates are alarming. According to Miller and McGowen (2000), individuals practicing medicine “are more than twice as likely as the general population to kill themselves” (p. 967). In short, a complex human emotion, unrealistic expectations of perfection, challenging educational systems, and professional and cultural norms are at the core of this wicked problem. Brown (2012) asserted that “perfectionism is a form of shame” (p. 130). On the surface, perfectionism may seem like a preferred way of being for the type of intensive learning that takes place within medical school. However, this way of thinking and other unrealistic expectations may lead to profound consequences (Miller & McGowen, 2000).

Adaptive vs. Maladaptive Perfectionism

In a study conducted by Enns and associates (Enns, Cox, Sareen, & Freeman 2001), the researchers compared MSs to students pursuing an art degree as way to better understand perfectionism and several other variables. In this quantitative study, 96 MSs participated from across the first three years of medical school. In addition, 289 undergraduates served as the comparison group. The findings suggested “significantly lower levels of maladaptive perfectionism and non-significantly higher levels of adaptive perfectionism in medical students compared with undergraduate students” (Enns et al., 2001, p. 1039). Their data also revealed that these facets of perfectionism “longitudinally predicts dissatisfaction with academic performance” in MSs (Enns et al., 2001, p. 1035). Several other interesting findings emerged as well. For example, according to these

researchers their study indicated a relationship between maladaptive perfectionism and challenges in mental health for these MSs, such as “neuroticism and symptoms of distress (depression, hopelessness)” (Enns et al., 2001, p. 1035). In short, this study suggested that either of these facets of perfectionism have implications for MSs.

At first, the study conducted by Enns and associates (2001) seemed to contrast the definition on perfectionism as a type of shame presented thus far in this chapter; however, this difference is perhaps explained by how these terms are characterized. For example, the maladaptive perfectionism assessed in this study appears related to Brown’s definition of perfectionism, which asserts that “perfectionism is self-destructive and addictive belief system that fuels this primary thought: *If I look perfect and do everything perfectly, I can avoid or minimize the painful feelings of shame, judgment, and blame*” (2012, p. 130). Regardless of these nuances, when self-talk shifts from a narrative of “I can work hard, learn, and grow from both my achievement and my failures” to “I can’t get this, and if I mess this up, well, I am the mess up,” then shame is speaking. If this darker narrative persists, feelings of shame may further develop.

Shame and Imposter Syndrome

A 2016 article by Villwock and associates described a study that investigated the impostor syndrome (IS) and feelings of burnout within MSs (Villwock, Sobin, Koester, & Harris, 2016). For their study, the IS was “characterized by chronic feelings of self-doubt and fear of being discovered as an intellectual fraud” (Villwock et al., 2016, p. 364). The researchers reached out to 2,612 MSs from cohorts from 2002 to 2012 at one medical school. Several interesting findings emerged from their study. For example, women were more likely to experience feelings of the IS than their counterparts. The

researchers also noted that White and Asian MSs were less likely to have experienced the IS (Villwock et al., 2016). Finally, the study revealed that the "IS was significantly associated with burnout" (Villwock et al., 2016, p. 366). This investigation was of relevance as it provided insight on how MSs experience the IS as well as its connection to burnout. If feelings of shame reflect the notion of not being enough as described by Brown (2012), the IS reflects a similar ideation, perhaps with a dimension of "otherness" as an added criterion for inadequacy compared to performance merit alone.

Similarly, Cowman and Ferrari (2002) examined the relationship between the IS and related phenomenon. A total of 436 first- and second-year college students participated in their study. The findings of this quantitative study suggested that "impostor tendencies are best predicted by behavioral self-handicapping and shame-prone affect" (Cowman & Ferrari, 2002, p. 124). Moreover, this study resulted in a number of noteworthy conclusions. For instance, these researchers asserted that there were "no significant gender differences" as it related to the IS measurements (Cowman & Ferrari, 2002, p. 122). This study was of importance as it supported the connection between maladaptive behaviors, feelings of shame, and the IS. More specifically, this study strengthened the need to assist all MSs in developing adaptive response to strong feelings such as the IS or the belief of not being good enough for medical school.

As the research illustrated, the IS phenomenon is closely connected to shame. Pointedly, feelings of the IS foster the negative self-talk that can undermine an MS's ability to respond to feelings of shame related to their academics adaptively. That is to say, feeling like an imposter in medical school reinforces shame triggers of negative beliefs that they are not "good enough" to be a MS and physician.

This section described shame and other phenomena as it related to the focus of this AR study. The following section reviews several key theoretical frameworks and studies that support the structure of this investigation. Finally, relationships between these theories are noted after this section.

Theories About How People Work Through Shame

Three theories and related studies are reviewed in this section. These theories were selected as they provided a conceptual framework for how individuals respond to shame. The first theory introduced is Nathanson's compass of shame described in his work *Shame and Pride* in 1992. Next, highlights of Van Vliet's (2008) grounded theory study are shared, which depict the "rebuilding of self" as it relates to shame resiliency (p. 238). Finally, this section concludes with an introduction of Brown's (2006) grounded theory study in which her definition of shame emerged along with her shame resilience theory (SRT). As noted, Brown's SRT was chosen to inform this study's innovation.

Compass of Shame

Understanding how individuals experience and move through feelings of shame were critical elements for this AR study. As noted, feelings of shame have been studied in many disciplines (Tangney & Dearing, 2004). The compass of shame is a theoretical model developed by psychiatrist and educator, Donald Nathanson (1992). Central to the compass of shame theory is how an individual responds to feelings of shame (Nathanson, 1992). According to Nathanson, individuals may move in four directions which reflect a different a "defensive strategy" to feelings of shame, hence forming a compass (Nathanson, 1992, p. 312). While the following provides a brief characterization or an example of each of these strategies, these poles are much more intricate in actuality. In

short, Nathanson described a range of possible responses and examples associated with each of these strategies. For example, Nathanson (1992) asserted that an individual that is withdrawing likely recognizes the feeling of shame and may retreat into one's "inner world" (p. 318). With attacking self, an individual is "willing to experience shame" and concede to the feeling (Nathanson, 1992, p. 313). For instance, this response may reflect shame tapes that sound like "I'm so dumb" or "I can't believe what a mess up I am." In terms of avoiding, an individual may focus their energy on maneuvering around the feeling of shame all together (Nathanson, 1992). Finally, this scholar contended that attacking others represents possible ways of lashing out as a means to "induce in the other the affects of shame" (Nathanson, 1992, p.367). In short, this theoretical compass provides an anticipatory map of "defensive scripts" or possible responses to feelings of shame (Nathanson, 1992, p. 312).

Elison, Lennon, and Pulos (2006) constructed a scale instrument to evaluate the different responses described by Nathanson's compass of shame. The instrument was derived from Nathanson's seminal publication, *Pride and Shame* (Elison et al., 2006). To sum up, their research findings added to the credibility of Nathanson's compass as a way of understanding these possible responses to feelings of shame (Elison et al., 2006).

In summary, Nathanson's theory provided a model for how individuals may react to shame. As noted, these responses move in different directions on this theoretical compass (Donaldson, 1992). This theory was helpful in understanding the focus of this AR study, as it highlighted possible responses to feelings of shame. The following theories explore on how individuals respond to and recover from feelings of shame.

Resilience as Rebuilding Self

Jessica Van Vliet, educator and researcher, conducted an inductive qualitative study to better understand how to "bounce back" from a significant experience that invoked feelings of shame (Van Vliet, 2008, p. 234). The primary purpose of this grounded theory study was to create a new theory for understanding resiliency to shaming experiences. Van Vliet recruited a study sample that included 13 individuals. Study participants were required to meet several criteria, such as having a "significant shame experience that occurred in adulthood" (Van Vliet, 2008, p. 234). In addition, an overall open-ended interview approach was used to allow the researcher to deeply explore the lived experience of each study participant. The following distills several key aspects of Van Vliet's theory. Again, this theoretical model is much more complex and rich than what the following highlights. According to Van Vliet (2008), the theory that emerged from the data suggests that the study participants responded to shame by conceding and grappling with the feeling, realigning their focuses in productive ways, as well as engaging in various ways of reaching out during the process. In addition, this theory suggests that these individuals questioned the feeling and their meaning making, as well as objecting valuations and countering narratives or experiences that may have reinforced their feelings of shame (Van Vliet, 2008).

In summary, Van Vliet's (2008) study and corresponding theory provided a closer examination of how individuals eventually moved through feelings of shame. More importantly, this study highlighted the ability of individuals to experience and respond to feelings of shame adaptively. Said differently, this theory provided additional insight and clarification on this action researcher's problem of practice.

Shame Resilience Theory

Brown's (2007) SRT helped explain how women with high shame resilience responded to shame in adaptive ways. The purpose of Brown's (2006) qualitative study was to develop a new theory to better understand why women experience feelings of shame. In addition, Brown sought to understand how shame affects women and how they experience this feeling. As such, Brown (2006) utilized a grounded theory approach to study how women manage the feeling of shame. This study focused on the stories of 215 women (Brown, 2006). Due to the nature of this study, Brown (2006) did not focus on specific demographics, but rather wanted a diverse pool of study participants. As noted, the findings resulted in the development of the SRT. The model reflects non-sequential continuums that defined and described how these women experienced and moved through feelings of shame (Brown, 2006). Brown (2006) asserted that "the research participants clearly identified 'experiencing empathy' as the opposite of 'experiencing shame'" (p. 47). According to Brown, this notion reflects each end of the continuum she identified for shame resilience. Moreover, Brown (2006) claimed the following:

> SRT proposes that shame resilience, as indicated by location on the shame resilience continuum, is the sum of (a) the ability to recognize and accept personal vulnerabilities; (b) the level of critical awareness regarding social/cultural expectations and the shame web; (c) the ability to form mutually empathic relationships that facilitate reaching out to others; and (d) the ability to "speak shame" or posses [sic]the language and emotional competence to discuss and deconstruct shame. (pp. 47-48)

In addition to exploring women's experience of shame, Brown's ongoing research included how men experience and respond to feelings of shame as well. In this scholar's publication, *Daring Greatly*, Brown (2012) shared "four elements of shame resilience" useful for anyone (p. 75). Simply put, Brown (2012) stated that, "Shame resilience is

about moving from shame to empathy—the real antidote to shame" (Brown, 2012, p. 74). For the purpose of this AR study, these four elements are referred to as shame resiliency practices (SRP). According to Brown (2012), these elements include:

> **1. Recognizing Shame and Understanding Its Triggers**. Shame is biology and biography. Can you physically recognize when you're in the grips of shame, feel your way through it, and figure out what messages and expectations triggered it? **2. Practicing Critical Awareness.** Can you reality-check the messages and expectations that are driving your shame? Are they realistic? Attainable? Are they what you want to be or what you think others need/want from you? **3. Reaching Out.** Are you owning and sharing your story? We can't experience empathy if we're not connecting. **4. Speaking Shame.** Are you talking about you feel and asking for what you need when you feel shame? (p. 75).

In other words, SRP reflects the elements associated with higher levels of shame resilience found on the continuums of SRT. Brown (2007) noted that "regardless of the words we choose, recognizing and understanding our triggers is essentially the same as recognizing and understanding our vulnerabilities, and this is a source of strength" (p. 77). Brown's work is critical for understanding this AR study, as it informed the focus of the educational innovation. In other words, this AR study was an application of these SRP as it relates to feelings of shame in academics within a medical education context.

Another significant outcome of this study was Brown's definition of shame that emerged from the data. Recall, Brown defined shame as "an intensely painful feeling or experience of believing we are flawed and therefore unworthy of acceptance and belonging" (2006, p. 45). In addition, Brown (2006) identified thematic categories in which the study participants experienced feelings of shame. According to Brown (2006), "These categories are appearance and body image, sexuality, family, motherhood, parenting, professional identity and work, mental and physical health, aging, religion,

speaking out, and surviving trauma" (p. 46). These findings further demonstrated how feelings of shame can emerge in different areas of an individual's life.

Researchers are now building upon and using Brown's research to inform their work within different populations. For example, a scale instrument was constructed and assessed through a study conducted by Claire Hauser as described in this researcher's 2016 dissertation. The intent of the instrument was to assess shame among individuals pursuing a mental health program in addition to their resilience to feelings of shame (Hauser, 2016). This quantitative tool was relevant to this AR study, as it demonstrated a way of studying shame in a healthcare setting, as well as a use of Brown's research.

In conclusion, this section reviewed ways individuals process feelings of shame. Specifically, these theories were selected to provide an deeper understanding for how individuals experience and respond to shaming experiences or feelings of shame. Nathanson's (1992) compass of shame provided a framework for understanding an individual's responses to feelings of shame. In short, each of these poles represented possible reactions to feelings of shame (Nathanson, 1992). The grounded theory studies conducted by Van Vliet and Brown provided frameworks for how individuals may move through shame in more adaptive ways. A related idea to these two theories is the notion of self-efficacy, which reflects an individual's belief in their competency or agency to reach a desired outcome (Bandura, 2001). In conclusion, these two studies provided pathways for responding to feelings of shame in more adaptive ways. More specifically, the studies conducted by Van Vliet and Brown illustrated practices of reflection and intentional actions. For the purpose of this AR study, self-efficacy in SRP reflects a MS's belief in themselves to move along this adaptive pathway.

Constructs, Sub-Components, and Definitions

The following section is provided to give clarity on the primary constructs and sub-components examined in this AR study. In addition, this section operationalizes key definitions used for the purpose of this study.

Academic Shame

As noted in Chapter 1, for the purpose of this AR study, shame was defined in two ways. First, shame is "the intensely painful feeling or experience of believing that we are flawed and therefore unworthy of love and belonging" (Brown, 2012, p. 69). Second, feelings of shame reflect a valuation of self (Brown, 2012; Fishkins, 2016; Tangney & Dearing, 2004). This AR study focused on feelings of shame triggered by academic related experiences of MS2s engaged in a pre-clinical curriculum. The construct of academic shame simply narrowed the scope of this study's definition of shame on the academic experiences of MSs during their first two-years at the COM. As such, for the purpose of this AR study, academic shame reflected the belief that *one is a bad medical student,* or *one is flawed as a medical student*. In other words, *not good enough* as MSs.

Shame Triggers

A shame trigger is any experience that invokes feelings of shame. For this AR study, an academic shame trigger was the term used by this researcher in conversations with MSs throughout the duration of this investigation. For the purpose of this AR study, *academic shame triggers* are simply defined as any experiences MSs may encounter related to their academics that may elicit feelings of shame. While shame triggers are different for MSs, due to the environmental, cultural, and professional demands of medical school, some academic shame triggers may be anticipated, such as block exams,

diagnostics, question banks, national board exams, and feedback. However, this AR study was focused on developing adaptive responses to feelings of academic shame experienced by MS2s at the COM.

Connection, Vulnerability, and Help-Seeking Behaviors

Connection. For the purpose of this investigation, *connection* was defined "as the energy that exists between people when they feel seen, heard, and valued; when they can give and receive without judgement; and when they derive sustenance and strength form the relationship" (Brown, 2010, p. 19). Brown's definition of connection was chosen for continual alignment. According to Brown, this type of connection is a vulnerable process (Brown, 2010). As such, vulnerability is defined next.

Vulnerability. Like shame, *vulnerability* is a word that individuals commonly do not understand do to stigmatizing connotations, such as weakness (Brown, 2012). Yet, according to Brown (2012), experiencing vulnerability is unavoidable, as is true for feelings of shame. For the purpose of this AR study, vulnerability was defined as "uncertainty, risk, and emotional exposure" (Brown, 2012, p. 34). Again, for the aim of alignment with Brown's work, her definition of vulnerability was chosen for this AR study. Vulnerability, as defined by Brown, was used in this AR study to operationalize help-seeking behaviors, which will be defined next.

Help-seeking behaviors. For this AR study, help-seeking behaviors were defined as the use of academic resources (tutors, learning specialists, block directors), personal resources (clinical psychologists, wellness mentors), or professional resources (professional and career advisors, associate dean). As noted, these resources are free for MSs during their medical education at the COM, so financial constraints are not a barrier.

In addition, there is no limit in their use of these resources. Earlier research was conducted at the COM in 2015, when Dr. Smith, the Director of SD, underwent multiple cycles of an AR study to better understand the perceptions and behaviors of MS1s and MS2s on help-seeking. Smith discovered that MSs at the COM seek help in specific ways. Based on her findings, Smith (2015) revealed that MS1s and MS2s often first seek help from individuals close to them, such as a partner or friend. Next, these MSs turn towards campus resources, for example their learning specialist or professional and career advisor. Deans and faculty are approached next, followed by external individuals, such as psychologists, or doctors, etc. Specifically, findings from her earlier stages of AR suggested that 21% of the MSs surveyed ($n = 40$) reported an inability to admit they needed help (Smith, 2015). Furthermore, 19% reported fearing the associated stigma of asking for help at the COM (Smith, 2015). In summary, Smith provided SD and COM with a better understanding of how MSs seek help and barriers to this adaptive behavior. Smith's innovation focused on an anti-stigma campaign to help normalize help-seeking behaviors. Over time, this change in practice has made the need and value of help-seeking behaviors more visible at COM. Unfortunately, seeking help is still a challenge for many MSs. Brown's definition of vulnerability describes the experience of help-seeking and sheds light on this challenge. In short, help-seeking requires MSs to practice vulnerability and thereby experience "uncertainty, risk, and emotional exposure" (Brown, 2012, p. 34). In other words, help-seeking is a vulnerable experience, as it requires an exposure of self, which has the potential to elicit feelings of shame. Finally, for the purpose of this AR study, help-seeking behaviors are a form of reaching out to others in

the context of academic-related experiences within medical education. According to Brown (2012), "reaching out" is an important aspect of shame resilience (p. 75).

Responses to Feelings of Shame

Maladaptive responses. While the range of responses to feelings of academic shame vary from student to student and from experience to experience, the literature on shame provide examples of how this AR study defined maladaptive responses. For instance, drawing upon Nathanson's (1992) compass of shame, one maladaptive responses to feelings of shame may include attacking behaviors. For example, if an MSs does not perform as well on a block exam, diagnostic, or board exam, he or she may blame or have anger towards the organization of the curriculum, instructional styles of a faculty, or academic resources like tutoring or learning specialists. In addition, Brown (2012) recognized self-protecting behaviors such as perfecting. More specifically, perfecting reflects "the belief that if we do things perfectly and look perfect, we can minimize or avoid the pain of blame, judgment, and shame" (Brown, 2012, p. 129). Brown (2012) asserted this type of thinking is flawed and unachievable. Similarly, numbing behaviors are ways to distract or dull oneself from feelings, including feelings of shame (Brown, 2012). Examples of numbing behaviors that this action researcher has observed in MSs are numerous, including over committing in activities, binging on Netflix, over exercising, drinking, and staying busy on non-academic tasks. Finally, Brown (2012) asserted that "serpentining" behaviors attempt to maneuver around the possibility of having certain experiences or feelings, such as shame (p. 165). More specifically, these behaviors may lead to "hiding out, pretending, avoidance, procrastination, rationalizing, blaming, and lying" (Brown, 2012, p. 165). In summary,

maladaptive responses were defined as behaviors that reflect the uneasiness to directly acknowledge and respond productively to feelings of academic shame.

Adaptive responses. For the purpose of this AR study, adaptive responses to feelings of academic shame reflect an awareness and understanding of shame, a belief that one knows how and can respond to feelings of shame constructively, as well as an openness to reach out to others. As such, the construct of adaptive responses to academic shame, was examined through three sub-components: (a) knowledge of shame, (b) self-efficacy in shame resiliency practices, and (c) intention of help-seeking behaviors. Knowledge of shame extended beyond a general understanding of the term, including how shame is defined by the literature and research. Furthermore, it included an understanding of the differences between feelings such as guilt and embarrassment. Finally, this sub-component reflected an understanding of self-talk as it relates to shame, as well as a knowledge of common triggers and maladaptive responses to the feelings that are identified within the research. The sub-component related to self-efficacy focused on the SRP identified by Brown (2012). The final sub-component, intention of help-seeking, reflected the likelihood of future help-seeking behaviors as related to academic resources. To reiterate, "reaching out" is part of Brown's SRT (Brown, 2006, p. 49). However, this AR study defined help-seeking behaviors as a specific way of reaching out to others in the context of academic-related experiences within medical education. These sub-components are further discussed in Chapter 3.

Vulnerability and shame are inescapable, despite the various strategies for coping with these feelings (Brown, 2012). Despite a history often laden with high academic performance, personal and professional accomplishments, and earmarks of persistence

and success, MSs experience feelings of academic shame. To add to this dilemma, medical school is seemingly filled with a barrage of potential academic shame triggers, such as passing the exams, performing well in formative and summative evaluations, passing a board exam, or passing a board exam with a high enough score for a desired specialty. According to Brown (2007), if someone is feeling vulnerable, a potential shame trigger is likely to be present as well. The normalization of feelings of academic shame and adaptive responses to the feeling, such as help-seeking, needed to be continually reinforced within COM. The theories and literature discussed in Chapter 2 demonstrated the imperative need for an educational innovation. As such, the development of shame resiliency was central to the design of the educational innovation.

Summary of Theoretical Perspectives and Research Guiding the Study

In Chapter 2, several theoretical perspectives and related studies were used to help focus the problem of practice identified within Chapter 1. More specifically, each section articulated relevant connections to help contextualize shame for this AR study. Chapter 2 highlighted the importance of supporting MSs' understanding of shame, as well as, their development of adaptive responses. This chapter also provided an understanding for the direction chosen for this AR study which was based on theory and existing literature. Finally, it defined the key constructs, sub-components, and terms in this AR study.

CHAPTER 3

METHOD

No research without action, no action without research.
~ Kurt Lewin

Chapter 3 focuses on the methods of Cycle 3 of this AR study. More specifically, it explains why AR and a concurrent mixed-methods design were chosen, describes the study participants and setting, summarizes the role of the researcher, and revisits the purpose of the study and guiding RQs. In addition, this chapter describes the study protocols, data collection tools, planned data analysis, limitations, potential threats to validity, and the educational innovation developed by this action researcher titled the Academic Shame Response Training (ASRT).

Action Research

According to Mertler (2017), AR is a methodical inquiry process that can be used by practitioners (educators) to improve their professional work. In short, the pragmatic nature of AR was a good fit for this investigation at the COM because the problem of practice existed within this learning specialist's daily work context. Moreover, reflection is an inherent component of AR studies (Herr & Anderson, 2015). Mertler (2017) defined reflection "as the act of critically exploring what you are doing, why you decided to do it, and what its effects have been (p. 13). This iterative nature of AR stimulates an ongoing and intentional approach to organizational change, which allows educational leaders to continually attend to complex problems within their practice. In this sense, AR is a way of practicing one's professional practice in a scholarly or scientific way. For all of these reasons, this approach was chosen for the overall design of this study.

Research Design

This AR study used a concurrent mixed-methods approach. This design includes the use of both qualitative and quantitative data (Ivankova, 2015; Mertler, 2017). In particular, the triangulation of the data was used to support the credibility of the study's conclusions (Plano-Clark & Creswell, 2015). Said differently, through the combined data collected from surveys, interviews, and student journals, this action researcher was able to better understand the influence of the ASRT. Simply stated, this process involved an analysis that looked at the convergence and divergence of data (Mertler, 2017). In other words, the concurrent mixed-methods design helped evaluate the influence of the study's educational innovation. According to Mertler (2017), this methodology allows the researcher to benefit from both quantitative and qualitative approaches, while comparing findings to increase the credibility of the study. The concurrent mixed-methods design also allowed this action researcher to better understand the application of Brown's SRP in the ASRT. Specifically, this design captured the incorporation of Brown's practices in different ways and over an extended period of time. To sum up, the combination of qualitative and quantitative approaches provided a fuller understanding of how the application of this theory supports development of adaptive responses to feelings of academic shame. The different sources of data, including survey responses, interviews, and student journals were analyzed separately and then combined for the final analysis. Even though all sources of data were utilized, the qualitative data were collected in a slightly greater proportion. In short, the use of a concurrent mixed-methods approach further stimulated the reflective processes, an element associated with AR as described by Herr and Anderson (2015).

Setting

Cycle 3 of this AR study was conducted during the 2019-2020 academic year at a college of medicine (COM) at a large state university, situated in an urban area of a large city in the southwestern United States. More specifically, the innovation and data collection occurred from July to November of 2019. As noted, the medical education training program at the COM is four years in length. Each year there are approximately 320 students enrolled at the COM, while each cohort is comprised of roughly 80 MSs. The first two years of the academic curriculum are considered pre-clinical and are primarily lecture or team-based classroom learning experiences. During Years 3 and 4, MSs engage in clinical experiences known as clerkships and rotations at community partner hospitals or at away out-of-state rotations. These experiences are more experiential in nature in which MSs can apply the medical knowledge they have acquired, while remaining under close supervision in a hospital setting.

Population, Participants, and Sampling

Population. Cycle 3 of this AR study focused on the experiences of MS2s as the unit of analysis. This population at the COM consisted of 80 MS2s in the current class. The average age of these MS2s was 24 (min 21, max 35). Of these 80 MS2s, 55% identified as female and 45% identified as male. In addition, 71% of these MS2s were in-state residents, while the remaining 29% were out-of-state residents. Of this population, 11% were considered underrepresented in medicine: African American (two), American Indian or Alaskan Native (two), and Mexican/Chicano/Hispanic/Latino (five). Finally, 24% of these MS2s were first generation students to go to college and 36% coming from low-income and working-class backgrounds.

The first two years of medical school are defined as pre-clinical experiences. Subsequently, Year 3 and 4 of medical school are considered clinical. This internal divide in the medical education training program allowed this action researcher to better acknowledge the limitations of the study. For example, this AR study focused on the academic experiences that elicit feelings of shame in MSs, rather than the clinical experiences MSs encounter during their training. Furthermore, these clinical experiences take place off campus at community hospitals that partner with the COM or at out-of-state away rotations. As such, more unknown variables exist externally. While future cycles may explore the experiences of MS3s and MS4s as it relates to this problem of practice, that focus was beyond the scope of the current study.

Participants. MS2s were chosen as the focus and scope of this study for two reasons. First, this study began in July at the start of a new academic year. At that time, MS2s had one full year of school completed. Thus, these MSs had lived experiences in medical school that provided them the contextual learning needed for participation in the ASRT, as study participants were asked to reflect on past academic experiences in medical school. Second, MS2s face increasing academic demands, as they must continue to perform well in their courses and prepare for their first board exam. If a MS2 is unable to pass this first board exam, they are dismissed from medical school. As such, their participation in the ASRT was relevant and timely.

Sampling. To determine the participants of this cycle research, a convenience sampling method was utilized. According to Creswell (2015), a convenience sampling is used when "the researcher selects participants because they are willing and available to be studied" (p. 144). After this action researcher received approval from the Office of

Research Integrity and Assurance's Institutional Review Board (IRB) to conduct this cycle, he reached out via email to the total population of MS2 (n = 80) inviting them to participate in the study. All of the MS2s who completed the required consent to participate in the study were invited to participate in the ASRT, as long as they were at least 18 years of age. Regardless of the study's findings, this sampling method provided the entire population of MS2s the opportunity to engage in the study. In addition, this method was sensitive to the intensive schedules of MS2s, allowing them to choose to opt in or out of this study. Furthermore, Creswell (2015) asserted that this sampling method is viable for answering RQs. Likewise, this method was chosen to minimize any potential bias in this process (Creswell, 2015). Although academically at-risk students were identifiable in a number of ways at the COM, such as consistent academic block performance of 75% or below, a block failure in clinical anatomy, or a block retake, a convenience method minimized the threat of regression. This threat may occur when participants "are chosen because of their extreme position on some variable" (Smith & Glass, 1987, p. 130). As such, this action researcher chose not to look at extreme groups, such as MS2s who were considered academically at-risk.

A total of 14 MS2s were recruited to participate in this AR study. The average age of these MS2s was 26 (min 23, max 34). Of these 14 study participants, eight (57%) identified as female and six (43%) identified as male. This sample size was appropriate for two reasons. First, this number of participants was large enough to conduct a repeated measures analysis (ANOVA), yet practical enough for this action researcher to complete, given the timing limitations of the dissertation framework. It is important to note, that no limit was set for the number of participants in the ASRT. Again, this action researcher

felt it was imperative to provide all MS2s the opportunity to participate in this study, should they had chosen to do so. Again, this approach minimized the potential threat of selection bias for the study (Creswell, 2015). It is important to note that this sampling method may reduce the ability to claim that the study participants were reflective of the larger population. However, this approach was viable, as a smaller sample allowed for a closer examination. In short, a thorough analysis of this AR study's data required an extensive amount of time. As such, this action researcher needed to be mindful of the time constraints and enact a plan that was feasible within the timing of this project.

Role of the Researcher

Recall, this action researcher has been employed as a learning specialist in Student Development (SD) for over five years. MSs meet with their learning specialist for several reasons, including support in areas of learning and study strategies, test-taking skills, resource exploration and application, school/life balance, and personal and academic stressors. In many ways, learning specialists serve as the COM's "go to" person for his or her assigned MS. The mission of SD is to "support the overall growth of our students by preserving a safe place for communication, assisting with the attainment of academic goals and enhancing strategies that promote a healthy school/life balance" (Student Development, para. 1). Yet, this mission does not come without its own set of unique challenges. Medical students regularly share the challenges they face while negotiating a high-stakes learning environment due to the trust that is built through this relationship. As an insider in the COM, this action researcher took on the role of both a participant in the experience and an observer in the study setting (Herr & Anderson, 2015). Within this positionality, this action researcher maintained his role and worked as

a learning specialist throughout the duration of this study. As such, his role of a researcher took place within the context of his daily work at the COM. For example, the development and facilitation of educational workshops were within the scope of a learning specialist and would not seem unusual or novel to MS2s. Due to the researcher's unique positionality, it was important to acknowledge inherent limitations of the design of the study, including the experimenter and novelty effects. More specifically, the experimenter effect reflects the potential influence of the researcher involved in a study (Smith & Glass, 1987). This effect is a concern for any researcher, but perhaps especially those who conduct action research within their own local context. For example, these MS2s had an existing relationship with this action researcher. While threats to validity cannot be eliminated entirely, they can be acknowledged and potentially minimized. This action researcher followed protocols and remained transparent about the nature of the relationship he had with the study participants. The MSs were versed in the importance of research and such challenges in carrying out studies. While the experimenter effect may take the form of either explicit or implicit bias, it was acknowledged and considered by this action researcher. Similarly, the novelty effect reflects a threat of validity that consists of changes occurring due to the newness of the independent variable (Smith & Glass, 1987). In other words, study participants may be uniquely intrigued or engaged by the introduction of ASRT. This action researcher introduced a new educational innovation in the form of the ASRT. To minimize the novelty effect, student journals were collected over an extended period of time, September-November. The collection of this data far extended the initial exposure of the ASRT that took place during July. In short, this action researcher needed to remain vigilant to these possible threats in validity,

as well as be transparent about these potential threats for consumers of this research. Finally, this action researcher was responsible for the collection and analysis of data throughout this AR study. Specifically, this action researcher was responsible for the administration of instruments, as well as, serving as the interviewer for the qualitative component of the study. The study also required this researcher to collect data once a month during the duration of the study. Finally, this researcher designed and facilitated the ASRT.

Data Collection

Purpose of the Study and Research Questions

As noted in Chapter 1, the purposes of this concurrent mixed-methods study were to determine to what extent does MS2s participation in the ASRT influence their (a) understanding of shame, (b) perception of their self-efficacy in regard to shame resiliency practices, (c) intention of engaging in help-seeking behaviors; and (d) to understand how MS2s respond to feelings of shame related to academic performance before and after participation in ASRT. The following research questions guided this AR study.

Research Questions

- RQ1: To what extent does participation in an ASRT influence MS2s' (a) understanding of shame, (b) perception of their self-efficacy practices in regard to shame resiliency, and (c) intention of engaging in help-seeking behaviors?
- RQ2: How do MS2s respond to feelings of academic shame during their medical education before and after participation in an ASRT (d)?

Table 2 illustrates the concurrent mixed-methods approach for this AR study. In addition, the table highlights the specific purposes, sources of data, and method in alignment with the research questions.

Table 2

Research Questions, Methodology, Method, and Sources of Data

RQ#	Purpose	Sources of data	Method
RQ1: To what extent does participation in an ASRT influence MS2s' (a) understanding of shame, (b) perception of their self-efficacy practices in regard to shame resiliency, and (c) intention of engaging in help-seeking behaviors?	The purpose of this three-part question is to assess if participation in the ASRT increases knowledge about shame, perception of self-efficacy practice in regard to shame resiliency, and intention of future help-seeking behaviors. These areas are components of adaptive responses to feelings of academic shame.	Pre- and post-innovation survey	Quantitative analysis: repeated measure of variance (ANOVA)
R2: How do MS2s respond to feelings of academic shame during their medical education before and after participation in an ASRT (d)	The purpose of this question is to better understand how MS2s respond to feelings of academic shame within the context of this AR study.	Post-innovation, semi-structured interviews Post-innovation, student journals	Qualitative analysis: constant-comparative method

Examined Sub-Components

As illustrated in Table 2, to answer these RQs, several different data sources were needed to better understand the influence of the participation in the ASRT. Research Question 1 is quantitative in nature and RQ2 primarily reflects the qualitative components of this study. More exact, RQ1 looked specifically at the sub-components that were used to examine adaptive responses to feelings of academic shame, the primary construct of this study. Whereas, RQ2 explored and focused on the lived experiences of these MS2s. However, the qualitative data sources were also used to further understand the RQ1 questions. Even though the primary construct and sub-components were introduced in Chapter 2, this section further describes how the different methods of data collection informed the investigation.

Knowledge of shame. First, knowledge of shame was measured on the pre- and post-innovation survey. More specifically, this sub-component was measured through survey items that looked at each participant's understanding of how shame is commonly defined within research literature, which moves beyond a general informal working understanding of the term. Next, it assessed each of the study participant's understanding the differences and nuances in the feeling of shame, compared to similar emotions such as guilt and embarrassment. In addition, it looked at the participants' understanding of the relationship between self-talk and shame. Finally, a sub-component specific item measured each of the study participant's understanding of common shame triggers and maladaptive responses that are identified within the research. In addition, data collected after participation in innovation from the semi-structured interviews and student journals also explored this sub-component. This sub-component aligned with RQ1.

Self-efficacy of shame resiliency practices. The perceived self-efficacy of SRP was measured by the pre- and post-innovation survey. In other words, this sub-component focused on the study participants' belief in their ability to incorporate these practices. A sub-component specific item on the survey measured each participant's ability to recognize his or her physiological responses to shame, as well as each one's unique shame triggers. Next, it included a measurement of each participant's ability to distinguish feelings of shame from other emotional responses, while recognizing when self-talk becomes shame talk. Finally, this sub-component included a measurement of each participant's ability to distinguish their adaptive responses to feelings of shame from maladaptive responses. Furthermore, data collected form the semi-structured interviews and student journals occurring after the study participants' engagement in the innovation were used to explore this sub-component. This sub-component aligned with RQ1.

Intention of help-seeking behaviors. Intention of help-seeking as it relates to adaptive responses to feelings of academic shame was measured by the pre- and post-innovation survey. For this AR study, help-seeking behaviors were defined by this researcher as the use of academic resources (tutors, learning specialists, block directors), personal resources (clinical psychologists, wellness mentors), or professional resources (professional and career advisors, associate dean). As mentioned in Chapter 2, these resources are free to MSs at the COM, so financial constraints were not a barrier. In addition, there was no limit on the amount of usage for any of these resources. Specific survey items related to this sub-component looked at the likelihood that the each of the study participants would seek help from these different resources. In addition, data collected from the study participants after their participation in the educational innovation

through the semi-structured interviews and student journals were used to further explore this sub-component. This sub-component aligned with RQ1.

Sources of Data

Quantitative Data

Pre- and post-innovation survey. To address the quantitative element of this AR study, a pre- and post-innovation survey was used to assess the effectiveness of the ASRT. This survey instrument allowed for easy data collection prior to the ASRT and at its completion. In short, the pre-innovation survey provided a baseline understanding of shame, perceived self-efficacy related to SRP, as well as, these MS2s' intention of future use of help-seeking behaviors. Scales of the pre- and post-survey were field tested in Cycle 1. A six-point Likert scale was chosen for the survey design. The actual pre- and post-innovation survey was created in Qualtrics. As described, the ASRT focused on knowledge of shame, perceptions on self-efficacy of shame resiliency practices, and intention of future help-seeking behaviors. More specifically, RQ2 was focused on what influence the participation in the workshop will have on participants' knowledge on shame. This sub-component included five specific items. For example, one survey item stated, "I know how shame differs from other emotions such as guilt, embarrassment, and humiliation." Similarly, the perceived self-efficacy in SPR was assessed through five specific survey items, such as "I can recognize my physiological responses to shame." Finally, the sub-component of intention of help-seeking was measured through eight survey items. For example, one item asked, "How likely are you willing to reach out to a tutor if you had feelings of shame related to your academic performance?" Again, the

findings of the pre- and post-innovation survey were compared to the analysis of the qualitative data sources. All survey items are found in Appendix D.

Quantitative data procedures. In terms of protocols, the pre-innovation survey was administered prior to the beginning of the first workshop and the post-innovation survey was administered at the end of the third workshop. A link to the survey was sent during these respective times and was designed to take the participants no longer than five minutes to complete. Because the survey was developed via Qualtrics, participants were able to complete the instrument on any electronic device with access to the internet.

Qualitative Data

Due to the nature of this concurrent mixed-methods study, several tools were used in the collection of data. To address the phenomenological element of this AR study, post-innovation semi-structured interviews and post-student journal prompts were utilized. The combination of tools helped to provide rich grounded descriptions of the qualitative components of the study. These tools asked more in-depth questions related to how MS2s thought about shame and their responses to feelings of academic shame before and after participating in the ASRT. In addition, questions further explored each of these study participant's knowledge of shame, self-efficacy in shame resiliency practices, and intention of help-seeking. Moreover, the semi-structured interviews allowed this action researcher to ask to follow up with clarifying questions; whereas, the student journal prompts captured the influence of the ASRT over the duration of the study. The smaller sample size permitted the complexity of this phenomenon to be examined more closely.

Post-innovation, semi-structured interviews. As mentioned earlier, study participants engaged in semi-structured interviews with the action researcher of this study

to gather more detailed accounts of how these MS2s respond to feelings of academic shame before and after participation in the ASRT. In addition, the semi-structured interviews further explored the influence of the ASRT. The questions were written by this action researcher. The interview questions aligned with all four RQS to address the *how* sub-component of this study. For example, one interview question asked, “How has participation in these workshops influenced how you think about your responses to feelings of academic shame? Similarly, another example of an interview question that also aligned with RQ1 asked, “Describe to what extent that you believe in your abilities can respond to feelings of academic shame adaptively after participation in the ASRT?” The complete list of the interview questions is found in Appendix B.

Post-innovation, student journals. The post-innovation journals were incorporated in the study to understand the influence of the participation in the ASRT. More specifically, these prompts asked participants to describe their responses to shame over the duration of the study. This approach allowed this action researcher to gather grounded descriptions of the influence of the innovation throughout this AR study. The journal prompts were created by this action researcher and were brief (one to three sentences), asking participants to reflect on their recent academic experiences. For example, the prompt read, “I experienced feelings of shame related to academics when:” and “While I was experiencing academic shame, I thought or felt:” and finally “I responded to this feeling by:” This design was chosen to be specific and structured to allow for expedient responses. MS2s are extremely busy and it was imperative to be sensitive to their time, as well as fatigue. The directions and prompts for the student journals are found in Appendix C.

Qualitative data procedures. The semi-structured interviews were conducted following the ASRT. The interviews took place in a private office setting at the COM. Interviews took no longer than 60 minutes and were scheduled at a time that was most convenient for the study participant. Prior to the start of the interview, study participants were asked for their verbal consent to participate in the interview, in addition to the original consent form for the study. In addition, they were asked if they would consent to have the interview recorded. Study participants used pseudo names in their responses if they referred to another person, such as “Person A” or “Person B.” Furthermore, study participants were reminded that they did not have to answer any question they did not wish to answer and could stop the interview at any time. Finally, the action researcher reminded participants that there were no right or wrong answers.

As for the structured student journals, a total of three submissions were collected electronically via Qualtrics. Prompts were sent during specific times. The student journal prompts were sent and collected during the end of September, October, and November. No journals were collected during the month of August, as the post-innovation interviews primarily took place during that time. The purpose of this gap was to be as respectful of the limited time MS2s have in their academic schedule. Again, this data sought to understand the influence of participation in the ASRT over an extended period; whereas, the pre- and post-innovation survey and interviews captured the more immediate influence of and reactions to participation in the ASRT.

Data Analysis

This section begins by recalling the purposes of this AR study. The following describes how the quantitative and qualitative data collected through the different sources

of data were analyzed. The first purpose of AR study was to measure three-specific components related to the construct of adaptive responses to feelings of academic shame. The second purpose of this inquiry was to understand *how*, rather than to measure *how much*. As noted, this action researcher wanted to understand how these MS2s responded to feelings of academic shame prior to and after participation in the ASRT. The qualitative nature of this purpose sought to simply understand these medical students' experiences, rather than to quantify them.

Procedures

Prior to the implementation of this study, the action researcher received approval from the IRB (Appendix A). A written consent was signed by each study participant. A verbal consent was also collected from during the interviews at the conclusion of the ASRT. The following sections describe the procedures used for both the collection and analysis of each data source. This section is followed by further limitations of this study.

Quantitative Analysis

For the quantitative component of this study, the data were analyzed through a deductive process. The independent variable of this analysis was the introduction of the ASRT to study participants. The dependent variable of this analysis, adaptive responses to feelings of academic shame were examined by the following sub-components: knowledge of shame, perception of self-efficacy in shame resiliency practices, and intention of help-seeking behaviors. A repeated measure ANOVA was used to compare the pre- and post-survey data. This analysis was appropriate as it compared the mean scores of the surveys to determine if there were any changes in the three components that reflected adaptive responses to feelings of academic shame. Furthermore, there are no

restrictions on the size of a sample for parametric statistics such as an ANOVA (Norman, 2010). The specific procedures of this analysis are provided in the following section.

To analyze the survey data, it was downloaded from Qualtrics and saved in an Excel file format. In addition, the data were saved in separate files to remain integrity of the data, so it was not used in the direct manipulation of the data. Next, that data were imported into the Statistical Package of Social Science (SPSS) software program, Version 24. Once the data were in SPSS, the file was saved and used for analysis within SPSS. Next, string variables, such as the unique identifier were created for each participant and cross-checked to ensure the accuracy of the statistical calculations. Then, nominal data such as gender and year in medical school were assigned a numeric value. Finally, ordinal data from the Likert scales were assigned a numeric value in SPSS. For example, *strongly agree* = 6, *agree* = 5, *slightly agree* = 4, *slightly disagree* = 3, and so on. The numeric assignment of these variables allowed for the analysis of descriptive and inferential statistics of the data in SPSS.

Recall, the pre- and post-innovation surveys measured knowledge of shame, perception of self-efficacy as it relates to resiliency practices to shame, and intention of future help-seeking behaviors. It is important to note that individual items were not analyzed separately. First, the reliability of each scale was tested using the reliability analysis in SPSS. The action researcher looked for a Cronbach's Alpha scores higher than $\alpha = .70$ which meets acceptable ranges of internal reliability (George & Mallery, 2003). Reliability testing was conducted on the pre- and post-innovation survey instrument as well as each scale of the survey. The reliability of the pre-innovation survey scales of knowledge was .78, self-efficacy was .79, and help-seeking was .70. The reliability of the

post-innovation survey scales of knowledge was .63, self-efficacy was .70, and help-seeking was .65. Two items were removed to enhance the reliability of post-survey scales. If these scales were included in the analysis of instrument, the overall reliability of the pre-innovation survey was .76 and post-innovation survey was .75. Although two of the post-innovation survey scales fell slightly below .70, it is important to remember the smaller sample size of this AR project. It is unknown if these differences in the post-survey scales were a result of the items or related to the sample. In short, the post-innovation survey scales may reflect a low level of variance in responses, in this case, possibly reflecting a ceiling effect within the study participants' responses on the post-innovation survey instrument. The reliability of the pre- and post-innovation surveys and each respective scale are reflected in Table 3.

Table 3

Pre- and Post-Innovation Surveys, Coefficient-Alpha Estimate of Internal Reliability (N = 14).

Construct	Within construct items	Number of items	Coefficient-alpha estimate of internal reliability
Pre-knowledge of shame	Items 1-5	5	.78
Pre-self-efficacy	Items 6-10	5	.79
Pre-help-seeking	Items 11-18	8	.70
Post-knowledge of shame	Items 1-5	5	.63
Post-self-efficacy	Items 6-10	5	.70
Post-help-seeking	Items 11-18	8	.65

Again, the alpha level criteria for this AR study was set at .05. This level indicates that this action researcher was willing to accept the probability of incorrectly rejecting the null hypothesis 5% of the time. Finally, the magnitude of any effect was also examined. According to Wasserstein and Lazar (2016), “Any effect, no matter how tiny, can produce a small *p*-value if the sample size or measurement precision is high enough, and large effects may produce unimpressive *p*-values if the sample size is small or measurements are imprecise” (p. 132). In other words, simply measuring the effect alone is not satisfactory (Wasserstein & Lazar, 2016). Finally, a descriptive statistics analysis was performed to determine the minimum, maximum, mean, and standard deviations. Third, inferential statistics were used to compare the means of each sub-component measured on the pre- and post-innovation surveys.

Qualitative Analysis

For the qualitative component of this AR study, this action researcher sought to understand the real-life experiences of these individuals (Brinkmann & Kvale, 2015). The following process was used to address RQ2. According to Mertler (2017), this type of inductive analysis involves “organization, description, and interpretation” (p. 173). This process required this action researcher to review and organize the narrative data through a coding scheme. This inductive process allowed the findings to emerge from the data. The underlining approach used for the coding and theming process was a constant comparative (Strauss & Corbin, 1998), which is described more fully in the following section. This "grounded interpretive approach" suggests interpretations are established based on the data (R. Buss, personal communication, Mar. nn, 2018). Mertler (2017) suggested the researcher should ask “how does this information in this category help me

understand my research topic and answer my research questions?" (p. 174). Finally, this action researcher looked at the data with the lens of how this information can address the current problem or help inform future actions as described by Mertler (2017).

Upon conclusion of the interviews, the audio recordings were transcribed by a professional service. The collected data from each interview used the unique identifier of each study participant for each transcription. This action researcher used HyperRESEARCH (HyperResearch 3.5.2, 2014) to analyze qualitative data collected through the interview process. This process began by reviewing all of the interview transcriptions. Next, the first interview was coded. These initial codes were then applied to the second interview and each subsequent interview. Continuing this constant comparative approach, additional codes emerged throughout the process until all 14 interviews were coded. Initially, 89 codes emerged from that data. However, these codes were refined to 46 individual codes upon successive reviews of the transcriptions, which eliminated any redundancy of codes reflecting like notions. Next, the 46 individual codes were grouped in 14 categories of codes. Descriptive notes of the codes and categories were captured and revisited throughout this process. Continuing a constant comparative approach, six themes emerged from these categories of codes. The themes that emerged were then reframed into assertion statements. To manage this process, an open-coding approach was used throughout the analysis of the interview data (Emerson, Fretz, & Shaw, 1995). More specifically, this line-by-line analysis allowed the findings to emerge from the data (Emerson et al., 2011). In addition, the process unfolded by ongoing interpretations which occurred over multiple iterations of review (Saldana, 2015). Similarly, the student journals were collected via Qualtrics. Again, this action researcher

used HyperRESEARCH (HyperResearch 3.5.2, 2014) to analyze qualitative data collected through the student journals. The constant comparative and open-coding method as described above were used for this data source as well. Table 4 provides a summary of this process. In addition, a complete codebook is found in Appendix E.

Table 4

Qualitative Data Analysis Process

Steps	Description
Step 1	Transcriptions were reviewed.
Step 2	The first interview was coded.
Step 3	Initial codes were applied to subsequent interviews. Additional codes emerged. A total of 89 codes emerged from the data sources.
Step 4	Through an iterative review process, the 89 codes were refined to 46 individual codes by eliminating redundancy.
Step 6	The 46 individual codes were clustered in 14 categories of codes.
Step 7	Six themes emerged from the 14 categories of codes.
Step 8	The six themes were utilized to identify 6 corresponding assertion statements.

To increase the credibility of the qualitative data analysis, a member-checking process was facilitated (Guba, 1981; Plano-Clark & Creswell, 2015). According to Maxwell (2005) this is powerful strategy to minimize misinterpretations within the qualitative data. Three study participants (20%) reviewed the final themes and assertions to help ensure the accuracy in the theming process. Study participants were asked to reflect on their own experience, along with their impression of the shared learning

experiences they had with the study participants, to see if their reflection aligned with the identified themes and assertions. As previously mentioned, after the initial analysis of this data was completed the findings were analyzed together to look for complementarity and consistency in the findings. This action researcher was cautious to look for discrepancies in the sources of data to support the trustworthiness of the interpretations.

The Innovation

As is evident by the literature, feelings of shame affect everyone (Brown, 2012). MSs are no exception to the deeply painful feelings that this emotion can evoke. As the earlier cycles of this AR study revealed, the high stakes and demands of medical education are rich with academic experiences that are potential shame triggers for MSs. These hotspots for feeling vulnerable are reinforced by cultural and professional expectations. As noted, there is an expectation in the field of medicine that implies work without any error or difficulty as described by Miller and McGowen (2000). Despite efforts to create a safe and non-competitive environment for learning medicine at the COM, feelings of academic shame are unavoidable for MSs. However, the development of maladaptive responses or coping behaviors is not inevitable. As such, the ASRT was framed around Brown's SRP. In addition, the research and literature on shame further informed the ASRT. For example, Brown's 2007 publication, *I Thought It Was Just Me (But It Isn't): Making the Journey from "What Will People Think?" to "I Am Enough"* provided additional clarity on shame resilience. It is important to acknowledge that Brown has developed a shame resiliency curriculum, titled *Connections Curriculum: A 12 Session Psycho-educational Shame Resilience Curriculum Paperback* in 2009; however, its aim is for those working in a clinical or therapeutic setting. This educational

innovation was focused on cultivating knowledge and awareness about shame, introducing new practices for responding to feelings of academic shame adaptively, and encouraging help-seeking behaviors in MSs at the COM. The learning objectives for three workshops are described below in Table 5. Finally, an informal optional session was offered to study participants in early October. The purpose of this session was to provide an additional opportunity for the study participants to connect and reflect on their experiences since participation in the ASRT. A total of six study participants attended. During this session, study participants were reminded of Brown's SRP and had the opportunity to further practice these practices.

Table 5

Learning Objective for ASRT's Three Workshops

Workshop	Student will be able to (SWBAT):
One	- Understand how shame is commonly defined within research literature. - Identify the difference in shame from other emotions such as guilt and embarrassment. - Describe the relationship between self-talk and shame. - Identify common shame triggers that are identified within the research. - Identify common maladaptive responses to shame identified within the research.
Two	- Recognize their physiological responses to shame. - Recognize their shame triggers related to academics. - Distinguish feelings of shame from other emotional responses. - Recognize their self-talk when it becomes a shame talk. - Distinguish their adaptive responses from maladaptive responses to feelings of shame related to academics.
Three	- Connect theory and practices in responding to feelings of academic shame adaptively. - Understand and apply the practices of shame resiliency to academic related experiences. - Grapple with challenges in shame resiliency within the context of medical education.

It is important to highlight the active learning elements of the ASRT. As noted in the discussion of the pilot workshops conducted in Cycle 1, study participants valued the active and experiential nature of the workshops. MSs are inundated by instructional lectures and Power Point Presentations (PPP). As such, these MSs appreciated that the workshops were focused on learning and doing rather than sitting and listening. A summary of the active learning elements of the ASRT are described in Table 6. To further illustrate how the workshops were facilitated, the lesson plan for Workshop One is provided in Appendix F.

Table 6

Summary of the Active Learning Elements of the ASRT

Workshop	Active Learning Elements
One	- Personal reflection activity (guided notes) - Small groups activity (focused on visualizing shame) and peer debriefing - Personal reflection activity (guided notes) - Five-minute instruction and videos (focused on defining shame) - Demonstration (focused on self-talk) - Small group activity (focused on shame triggers) - Instruction and discussion (videos, examples, discussion focused on responses) - Small group activity (focused on responses to feelings of shame)
Two	- Large group discussion (examples, discussion focused on core emotions) - Small group activity (identifying physiological responses to academic shame) - Personal reflection activity (guided notes) - Five-minute lecture and video - Personal reflection activity (guide notes) - Small group work (responding adaptively to feelings of academic shame) - Five-minute lecture and video (shame resiliency)
Three	- Problem solving activity (seeing patterns) - Experiment and discussion (recall) - Large group discussion (the stories we tell ourselves) - Practice the practice (SRT) through visualization, labeling, and board-breaking and peer sharing activity - Large group wrap-up discussion and demonstration on personal worth

Informing Theories and Studies

The theories and studies discussed in Chapter 2 demonstrate the imperative need for this type of educational innovation. Although Nathanson's and Van Vliet's theories were useful for understanding and framing this AR study, Brown's SRT was chosen to inform the framework for this educational innovation at the COM. As noted, earlier cycles of this AR study, suggested that continual alignment with this theory was prudent. Additional studies highlighted in Chapter 2 focused on perfectionism and the imposter syndrome as related to this investigation. In summary, the theories and studies presented in Chapter 2 underscore the relevance and focus of developing adaptive responses to feelings of academic shame in this population.

Innovation acceptance and use. Hall and Hord's (2011) work on innovations was applied to the development of the ASRT as a way to both understand and support this change in practice process. More specifically, Hall and Hord looked at levels of use and acceptance of individuals. According to Hall and Hord's theory, Level 0 means the individuals have no recognition or perhaps concern about the change. Next, Level I refers to individuals who demonstrates some level of curiosity or has learned something about the change. Individuals categorized as Level II has a deepened understanding about the importance of the change and may begin to grapple with it and how they can implement the new learning or change. Level III describes use of the new learning or implementation of change by these individuals, but they still lack proficiency or consistency in the application of their new learning. Finally, Level IV individuals demonstrate a newly formed habit or practice. In other words, these individuals can apply their new learning to future experiences (Hall and Hord, 2011). Again, this theory was

applied to the MS2s participating in this AR study's educational innovation. In short, Hall and Hord's theory provided a framework to anticipate how the MS2s would experience this change process as a result of the change in practice. In addition, it provided this action researcher with a reference point for how to attend to different needs of the MS2s as they moved through a change process. The development and roll out of the ASRT had inherent opportunities and challenges. The goal of designing an educational innovation with a change theory in mind was to enhance its success by making decisions in a deliberate and purposeful way. Thus, this theory complemented the ASRT, as the desired outcomes were changes in both cognition and behaviors. Finally, Hall and Hord's theory on acceptance and use aligned with Brown's "elements for shame resilience" (2012, p. 75). In other words, these practices require awareness and understanding followed by ongoing application by a user.

In summary, the purpose of the ASRT was to help MS2s normalize feelings of shame related to their academics and to respond to these feelings in more adaptive ways. More specifically, the ASRT (a change in practice) at the COM was needed to (a) cultivate awareness and understanding of shame, (b) normalize feelings of shame related to academics, (c) introduce new practices focused on resiliency to the feeling, and (d) continue to encourage help-seeking behaviors (as an adaptive response to feelings of academic shame). As illustrated in this section, the ASRT was composed of a three-part workshop series that included content instruction, self-reflection, interactive group experiences, as well as varied opportunities for the application of the new learning.

Trustworthiness of Study

The purpose of an AR study is to understand and respond to a problem of practice within a specific context. As such, this study was inherently localized in its scope. For example, the sample size of the study was 14 MS2s; as such this action researcher was not be able to generalize the findings to the larger population of MS2 (n = 80) at the COM. External consumers of this AR project should compare the setting of this study to their unique context to draw their own conclusions on the generalizability and applicability of the findings for their own purposes. As noted, to help improve the trustworthiness of this study, this action researcher continual compared the findings and interpretations of this data. This triangulation was essential to more fully understand the outcomes of this study. In addition, this design enhanced the credibility of the analysis (Plano-Clark & Creswell, 2015). The data from the pre- and post-survey instrument, post-semi-structured interviews, and post-student journals were triangulated. In an effort to strengthen the trustworthiness of this AR study, several additional threats to validity are discussed in the following section for further transparency.

Limitations of the Study

Consumers of this AR should also be aware of the following potential threats to validity of this study. In effort to attend to these potential threats, this action researcher utilized the threats to validity as described by Smith and Glass (1987). More specifically, the following section describes applicable threats and discusses ways this action researcher sought to minimize their potential influence.

History. Smith and Glass (1987) suggested that one potential threat to validity is history and its potential influence on the dependent variable, which in this case was

adaptive responses to feelings of academic shame, as measured by these MS2s' knowledge of shame, self-efficacy in shame resiliency practices, and intention on help-seeking behavior. In short, experiences or events that occur within the duration of this study may influence the dependent variable (Smith & Glass, 1987). History, in this sense, is a potential internal threat to the AR study's validity. More specifically, it may reduce the strength of a study's claim that the independent variable (ASRT) influenced the dependent variable (Plano-Clark & Creswell, 2015). While this action researcher was unable to control all potential variables that took place during the timescale of this AR study, he did, for example, remain vigilant of potential campus events or discussions on related topics. In addition, he could control the exposure of the independent variable (ASRT) and examine these variables though multiple data sources. During the course of this study, no one was addressing this problem of practice at the COM. In addition, this action researcher worked with campus partners to ensure no duplication of efforts.

Maturation. Although history focuses on external variables that may potentially influence the dependent variable, maturation focuses more so on possible internal changes (Smith & Glass, 1987). More specifically, "these internal events consist of physiological or psychological development that occurs naturally through the course of time, or as the subject grows older, more coordinated, fatigued, bored, and the like" (Smith & Glass, 1987, p. 128). In other words, study participants are developing individuals and some internal changes may occur due to normal growth processes, rather than the influence of an independent variable (ASRT). Similar to the history, this action researcher was unable to account for and control maturation within study participants. However, he can recognize this threat to validity within his data analysis. Moreover, this

action researcher was mindful of his data collection tools. For example, special consideration on word choice on the pre- and post-survey, interview questions, or journal prompts to clarify and strengthen any conclusions drawn about the relation between independent and dependent variables. In addition, the process of triangulation capitalizes on the strengths of different methods by looking at data from multiple sources (Plano-Clark & Creswell, 2015). As previously mentioned, this action researcher utilized a mixed-method study for the purpose of triangulation. This approach minimized the threat of maturation, as this action researcher looked for complementarity within the data to strengthen the claim that the influence came from participation in the ASRT. In addition, member-checking was also conducted to help ensure the accuracy of interpretations. In short, this process provided the study participants the opportunity to review findings and interpretations in an effort to improve the study's trustworthiness (Ivankova, 2015).

Practice effect. The practice effect suggests that a higher scores may be a result of the continual use of the same tool, rather than the independent variable (Smith & Glass, 1987). This particular threat is of relevance to this AR study, as a pre-innovation survey was provided to participants before exposure to the ASRT and a post-innovation survey was used at the completion of the workshops. Similar to the other threats to validity, this researcher was not able to fully account for the potential alterative hypothesis for the findings of the study. However, similar to the threat of maturation, the use multiple sources of data were used to help minimize the potential influence of the practice effect. For example, in addition to the pre- and post- innovation surveys, this action researcher used interviews as well as student journals. If the data were collected

from multiple sources and were complementarity, it strengthens the potential findings of the pre- and post-survey analysis.

Mortality. According to Smith and Glass (1987), mortality in a study is another possible threat of internal validity. In short, this threat describes the possible influence of any study participants departing the study over the course of the investigation (Smith & Glass, 1987). This particular threat in validity was a concern of this action researcher, as MS2s are extremely busy, and the timing of any study/innovation must carefully be considered. As such, this action researcher launched the study at the start of the academic year, which began in July. As the academic year continues, MS2s find themselves with little or no extra time and tend to be less inclined on participating in optional activities. While the timing of the ASRT did not completely eliminate the mortality threat, it may have minimized its potential influence as all 14 of the study participants continued their engagement in the study over its duration.

Hawthorne Effect. The Hawthorne Effect describes the idea that simply any change would influence the findings desirably (Smith & Glass, 1987). Simply put, MS2s are developing people and medical school is not a static experience. As such, not all changes can be accounted for by this action researcher. Changes in the dependent variable may occur as a result of any potential influencing the variable. Although the Hawthorne Effect is a concern for any research study, its potential influence may be minimized by the triangulation of data. As such, through a reflective process, this action researcher looked for other potential influencing variables in his review of the data. Again, this action researcher used member-checking process to help improve the accuracy of interpretations (Guba,1981).

Researcher. Another concern for this study was the potential bias of the action researcher. This threat to validity inherently exists within any AR study, as the investigation is being conducted by the scholarly practitioner within his own local context. As such, this action researcher remained watchful of the possible presence of confirmation bias, in other words, only searching for the outcomes that confirmed what he had hoped to be seen in the delivery of the innovation at the COM. The use of multiple sources of data were used to help minimize the potential influence of this action researcher's bias and positionality. In addition to member checking, an audit trail as described by Guba (1981) was kept throughout the analysis of the qualitative study. This trail captured the *thinking* of this action researcher throughout the process to increase the intentionality and transparency of the analysis of this data (Guba,1981). Even though the role of this AR researcher may be considered a possible limitation, it is also a strength of this study. The purpose of AR is examining a problem of practice within one's own context. This action researcher knew both the culture and the MSs at COM well. This deeper understanding of the context and pre-existing relationship with the AR study participants aided in the development and facilitation of the innovation.

Size and scope. As previously stated, the size and scope of this AR study were intentionally small. Though these factors may be considered as limitations of the investigation, the sample's size and respective depth were appropriate for the purposes of this AR study. As noted, the purpose of this study was not to create broad and generalizable conclusions beyond the COM. However, the pragmatism of AR was appropriate for these efforts to systematically and deeply examine this problem of practice within this action researcher's own context. Moreover, the rigor of this research

endeavor came from multiple cycles of research that informed each other. Finally, the complementarity and alignment between each cycle of the research strengthened the credibility and trustworthiness of this AR study.

In summary, Chapter 3 focused on the actual methodology of Cycle 3 of this investigation: rationales for research design, study protocols, data collection tools, steps for data analysis, as well as an overview of the ASRT. Finally, Chapter 3 concluded with a discussion on limitations and potential threats to validity to this AR study. Chapter 4 presents the findings of the Cycle 3 this investigation.

CHAPTER 4

THE FINDINGS

The voyage of discovery is not seeing new landscapes
but having new eyes.
~ Marvel Proust

Recall that the method of Cycle 3 was fully described in Chapter 3. This description included a rationale for why a AR and mixed-method design was chosen. Chapter 3 also portrayed the observed study protocols, data collection tools, procedures for data analysis, limitations, potential threats to validity, as well as an overview of the action researcher's innovation, the ASRT. Chapter 4 presents the findings of Cycle 3 of this AR study. The findings of this investigation are presented in two sections. The first section focuses on RQ1, which was the quantitative question; whereas the second section addresses RQ2, the qualitative question of this AR study. The following presents the RQs again.

- RQ1: To what extent does participation in an ASRT influence MS2s' (a) understanding of shame, (b) perception of their self-efficacy practices in regard to shame resiliency, and (c) intention of engaging in help-seeking behaviors?
- RQ2: How do MS2s respond to feelings of academic shame during their medical education before and after participation in an ASRT?

Please note, that a discussion of the findings is found in Chapter 5.

Quantitative Findings

To address RQ1, the data collected from the pre- and post-innovation survey instrument was used for the analysis. As illustrated in Chapter 3, the overall reliability of

the pre- and post-innovation survey instruments met acceptable ranges upon analysis. The following section details the findings of the repeated measure ANOVA, measurement of effect size, as well as descriptive statistics from the pre- and post-innovation survey data.

Repeated Measures Analysis of Variance

To complete the analysis of the quantitative data, a multivariate repeated measures of analysis of variance (ANOVA) was utilized to ascertain if there were changes in pre- and post-survey scores of the 14 study participants (Appendix D). The construct of adaptive responses to feelings of academic shame were examined in three sub-components: knowledge of shame, self-efficacy in shame resiliency practices, and intention of help-seeking behaviors. Upon analysis of the data, the multivariate analysis was significant, multivariate-$F(3, 11) = 48.21$, $p < .001$ and $\eta 2 = .93$. Further, this analysis revealed a large effect size for a within-subjects design as measured by Cohen's criteria (Olejnik & Algina, 2000). After the multivariate analysis was completed, individual, univariate repeated measures ANOVAs showed there were changes in pre- to post-intervention scores for each of the three components defined in this study that reflected adaptive response to feelings of academic shame. More specifically, the repeated measures ANOVA for knowledge of shame was significant, $F(1, 13) = 40.91$, $p < .001$ and $\eta 2 = .76$, which was a large effect size for a within-subjects design (Olejnik & Algina, 2000). As for self-efficacy in shame resiliency practices, the repeated measures ANOVA was also significant, $F(1, 13) = 75.99$, $p < .001$ and $\eta 2 = .85$, again revealing a large effect size for this component. Likewise, the repeated measures ANOVA for intention for help-seeking behaviors was significant, $F(1, 13) = 26.74$, $p < .001$ and $\eta 2 = .67$. Once more, this analysis reflected a large effect size for a within-subjects design

(Olejnik & Algina, 2000). As noted in Chapter 3, reporting repeated measures alone is not satisfactory to understand the tested hypothesis (Wasserstein & Lazar, 2016).

In addition to the findings above, Table 7 depicts the means and standard deviations of each the three components examined on the pre- and post-survey instruments. The difference between the means ranged from .84 to 1.75, which suggest considerable differences in the sub-components used to measure adaptive response to feelings of academic shame as captured by the pre- and post-innovation survey instruments. In addition, the F value and p values of the analysis are provided.

Table 7

Pre- and Post-Innovation Survey, Means and Standard Deviation (SD, F and p values)

Components	Pre Mean	Pre SD	Post Mean	Post SD
Knowledge of shame	3.64	0.93	5.39	0.39
Self-efficacy in shame resiliency practices	3.55	0.71	5.20	0.45
Intention of help-seeking behaviors	2.80	0.69	3.64	0.62

In summary, the quantitative findings suggested that exposure to the educational innovation resulted in statistically significance differences in the examined sub-components, which compromised the construct of adaptive responses to feelings of academic shame. The pre- and post-innovation survey means also depict these changes within the examined sub-components.

Qualitative Findings

Chapter 3 described the different qualitative data sources that were utilized to uncover if and how participation in the ASRT influenced the study participants. In short, these data sources sought to answer RQ2. As previously noted, all 14 of the study participants completed interviews that followed the ASRT. In addition, the study participants responded to three journal prompts over the course of three months after participation in the ASRT. Table 8, which follows, depicts the six themes, categories based on codes, and assertions that emerged from these data sources. This section is followed by richer accounts of each theme and assertion. In an effort to add clarity to the themes and assertions, grounded evidence is included in these descriptions.

Table 8

Themes, Categories based on Codes, and Assertions

Themes and Categories based on Codes	Assertion
Theme One *The anatomy of shame.* 1. Deepened understanding of shame and academic shame. 2. Differential diagnoses of guilt and embarrassment.	*The ASRT enhanced knowledge of and understanding of feelings of shame, as well as, how this feeling influences academics.*
Theme Two *The physiology of academic shame triggers.* 1. Academic shame agents. 2. Different measuring sticks.	*Feelings of academic shame are regularly invoked by specific academic shame agents or different measuring sticks.*
Theme Three *Turning the spotlight on academic shame and the value of vulnerability.* 1. Exposing shame. 2. Practicing vulnerability.	*The ASRT served as an opportunity to normalize feelings of academic shame by providing a safe place to talk about the feeling and an opportunity to practice vulnerability.*

Table 8 continued on next page

Table 8 (continued)

Themes, Categories based on Codes, and Assertions

Theme Four *Changes in the self-efficacy of shame resiliency practices.* 1. Practicing shame resiliency. 2. Adaptive responses to feelings of academic shame. 3. Challenges in practicing shame resiliency.	*The ASRT promoted changes in self-efficacy of shame resiliency practices and fostered awareness of inherent challenges to practicing these practices.*
Theme Five *Counteragents to feelings of academic shame.* 1. Connection with others as counteragent to feelings of academic shame. 2. Help-seeking as a counteragent to feelings of academic shame.	*Connection and help-seeking are counteragents to feelings of academic shame.*
Theme Six *Challenges and opportunities for minimizing feelings of academic shame and fostering shame resiliency.* 1. High expectations and perfecting. 2. Challenges to be negotiated. 3. Enhancing our culture.	*There are opportunities for macro and micro level changes in practices at the COM to minimize feelings of academic shame and further foster shame resiliency in medical students at the COM.*

As mentioned, the following section provides richer accounts of each identified theme and assertion statement. Supporting qualitative data are integrated within these descriptions to provide an illustration each finding.

The Anatomy of Shame

The ASRT enhanced knowledge of and understanding of feelings of shame, as well as, how this feeling influences academics. This theme was composed of two

categories that led to this assertion: (a) a deepened understanding of shame and academic shame, as well as (b) differential diagnoses of guilt and embarrassment. The following section describes each of the supporting categories.

Deepened understanding of shame and academic shame. This category of codes reflects how study participants thought about feelings of shame and academic shame before and after their participation in the ASRT. Even though the study participants were familiar with the term *shame* prior to the workshops, their understanding of the feeling was much more nebulous or encapsulated other feelings. One study participant shared,

> I think, I didn't have a very good sense of what I thought shame was. I kind of like conflated a number of ideas like embarrassed, guilt, and then put those together and said that's shame. I remember you asked that question when we started and I was like, "I don't really know what I think of that." (MS2 Interview 1, Aug. 30, 2019).

A different study participant shared that "I was not aware of shame. It wasn't a vocabulary that you know, it was either frustrated, stress or just depressed. But prior to the workshop, I had like no concept of shame" (MS2 Interview 1, Jul. 31, 2019). In addition, shame was described as externally driven by some study participants. For example, one MS2 shared, "You hear the verb, to shame someone else and so that's more probably what I would have thought beforehand where it's how other people are perceiving you and that's causing you to feel that way" (MS2 Interview 1, Aug. 8, 2019). Similarly, another study participant added, "I think prior to the workshop I just thought of shame as like being ashamed, almost more like embarrassed" (MS2 Interview 2, Aug. 13, 2019). As illustrated, these prior understandings of shame were abstract or confounded with other emotions.

In terms of academic shame, the study participants' understanding of this term was very ambiguous. For example, one study participant shared, "My previous understanding of academic shame would be more of . . . I kind of touched on it earlier, but more nebulous just not feeling to great after an exam, like, 'Oh I wish I had done better but whatever'" (MS2 Interview 1, Aug. 1, 2019). This study participant also shared, "It was more of the bad feelings around it and I never really took the time to analyze what those feelings were, what they meant, or how to deal with them properly" (MS2 Interview 1, Aug. 1, 2019). Another study participant stated that "I would have thought it was more like an inability to like self-motivate" (MS2 Interview 1, Jul. 13, 2019). This MS2 added:

> At the time prior to the workshop, I just—I didn't name it shame. It was more like, I guess, it was understanding that more like a failure. Well, kind of like my own personal failure, kind of. So yeah, I just didn't name it. (MS2 Interview 1, Jul. 13, 2019).

Furthermore, one MS2 shared,

> I think the way that I conceptualized it before was kind of that 'keeping up with the Jones's' kind of mentality of intellectually knowing everyone around you is kind of probably doing the same as me, but always feeling like I could be doing better or that everyone else is doing better." (MS2 Interview 1, Jul. 30, 2019).

Similarly, another study participant stated, "Academic shame, I would describe as the feeling that you're not keeping up or not as smart as everybody else, which kind of intrinsically is kind of takes you the next step of like, 'Oh, I don't deserve to be here'" (MS2 Interview 2, Aug. 6, 2019). This description is much more precise, reflecting the notion of the imposter syndrome. However, the direct connection to feelings of academic shame was less explicit. In contrast, one study participant shared having a solid understanding of academic shame prior to participation in the ASRT, because of

grappling with the feeling of academic shame in undergraduate studies. This study participant shared,

> I was not a great student the first couple of years in college, and I definitely felt a lot of shame there initially. I kind of sublimated it, pushed it under by pursuing other activities, and I realized at a certain point that if I didn't confront this, one, there was no way I was going to be a doctor and I wouldn't be able to help people in the way that I wanted to, so I had to confront that, shame head on, and two, I realized, just on a more practical level, if I feel this way all the time, I'll never feel great about myself, so I need to do something different. (MS2 Interview 1, Aug. 6, 2019)

Although this MS2's experience and prior understanding of academic shame differed from the other study participants, it highlights the critical importance of learning how to respond adaptively to this feeling.

As noted, the study participants' knowledge of and understanding of shame and feelings of academic shame were enhanced through their participation in the ASRT. In short, the study participants were much more precise and descriptive in how they thought about these notions after engaging in the innovation. For example, an MS2 stated that "shame is about my person, my character, who I am, and that's a lot deeper and a lot harder to just brush off" (MS2 interview, Sep. 9, 2019). Similarly, a study participant shared, "Now I can tell it's also what you think about yourself, and what you tell yourself. It can also be on a personal level instead of what the world sees you as. It can just be what you see yourself as" (MS2 Interview 1, Aug. 13, 2019). Furthermore, an MS2 stated, "I would think of shame as kind of an internalized feeling and thought that not only did I do something wrong, but I am wrong, or I am bad and that's why I did it" (MS2 Interview 1, Aug. 8, 2019). These examples illustrate how these study participants recognized that shame is tied to one's sense of self as described by Brown (2007). One MS2 captured this notion by using a medical analogy. This study participant stated,

> Shame in a sense is one's own rejection of self and it's a really, it's like an auto antibody, where I would say if you have a Hashimoto's thyroiditis, you know you have an antibody against your own thyroid. And it's like your body's rejecting itself in a sense. And that's a vicious circle even in the physical sense. But in the psychological sense, having shame it's almost like you are rejecting yourself and that's . . . There will be people that will not like you and not accept you, but when you don't accept yourself, that's a very difficult place to be. (MS2 Interview 1, Sep. 9, 2019)

All of these examples illustrate a deeper awareness of the anatomy of shame. In short, they described what the feeling is and is not differently after participation in the ASRT.

In terms of having improved understanding of academic shame, the study participants applied their new understanding of shame to the context of their academics. For example, a study participant stated that “academic shame is an internalized thought process or feeling that you probably are unworthy as a student or that you're not good enough as a student” (MS2 Interview 1, Aug. 8, 2019). Another MS2 commented,

> It's really the expectations that we have set for ourselves academically. The expectations of a certain percentage of points on really anything that we can compare ourselves on, exams, practice questions, completion percentage of Anki cards or what have you. It's shame as it directly relates to the academic portions, particularly those that could be used to compare us to each other. (MS2 Interview 1, Aug. 13, 2019)

These examples highlight the different areas in which academic shame may emerge. Similarly, a different study participant added, “I think academic shame is related to not achieving goals that you've set for yourself that may not be achievable or for me, academic shame is a lot like comparing myself with others” (MS2 Interview 2, Aug. 8, 2019). Finally, an MS2 captured how the feeling of academic shame reflects the notion of not being a *good enough* MS and shared the following:

> I think before the workshops I wouldn't have described how I was feeling academically as shame. I thought it was just me not feeling good enough to be here, but maybe everyone else feeling that way or maybe not. I didn't really realize it was as deeply rooted as shame. (MS2 Interview 1, Aug. 7, 2019)

Reiterating from Chapter 2, for the purpose of this AR study, this quote reflects the feeling of academic shame, the belief that one is a bad or flawed as a medical student.

Differential diagnoses of guilt and embarrassment. The second category related to the anatomy of shame reflects the study participants' ability to distinguish from feelings such as guilt or embarrassment. For example, one study participant stated, "Guilt is sort of the feeling of responsibility that you have for not having done something or maybe for having done something wrong" (MS2 Interview 1, Aug. 13, 2019). Similarly, one MS2 summarized the difference between shame and guilt as "guilt, we talked about being more of you feel like you did something wrong, but you don't feel like a bad person at the core. It doesn't define you the way shame defines you" (MS2 Interview 1, Aug. 7, 2019). In terms of embarrassment, a study participant described it as follows:

> Well, I think embarrassment is transient and it's related to—you've done something silly, and somebody seeing you do something silly, and then you just feel flustered and embarrassed but to not . . . Even we're not using the word *embarrassed* but then you just feel flustered and like, "Oh gosh, they saw what I did." It's like, "I don't want to do that again because I don't want people to think that this is the kind of thing that I do. I got a piece of toilet paper stuck to my foot or something." (MS2 Interview 1, Aug. 30, 2019)

This reflection underlines the more fleeting nature of embarrassment, as well as the notion that this feeling is not tied to one's sense as self, as with feelings of shame as described by Brown (2007). Another study participant noted the following as a difference between shame:

> I think you can feel paralyzed by shame in a way those two other emotions cannot really do to you. Embarrassment, you can kind of improve on. Right? It means you weren't prepared for something, I think, in most cases, and you can do a little more work beforehand the next time you have a similar encounter and improve on your mistakes. (MS2 Interview 1, Aug. 6, 2019)

Again, this example illustrates an understanding that embarrassment is likely tied to a behavior rather than one's sense of self. In short, these instances depict how the study participants distinguished feelings of shame from guilt or embarrassment after their participation the ASRT.

In conclusion, this theme and assertion reflects a deepened understanding of shame and academic shame, as well as the study participants' ability to differentiate feelings of shame from other emotions, such as embarrassment and guilt. In other words, they have a better understanding of the anatomy of shame. The following section describes the connection between academics and feelings of shame.

The Physiology of Academic Shame Triggers

Feelings of academic shame are regularly invoked by specific academic shame agents or different measuring sticks. This theme was composed of two categories that led to this assertion: (a) academic shame agents and (b) different measuring sticks. In other words, both of these categories reflect the function of different academic shame triggers. Reiterating for the purpose of this AR study, academic shame triggers are defined as experiences MSs may encounter related to their academics that may elicit feelings of shame. The following section describes each of the supporting categories.

Academic shame agents. This category captures specific academic shame agents identified in this cycle of research. Broadly speaking, this category includes a collection of academic shame triggers that reflect specific people and experiences that elicit feelings of academic shame. In a sense, these academic shame triggers were more subjective in nature. More specifically, 12 specific shame eliciting agents emerged from the qualitative

data. Table 9 depicts the frequency of these agents by individual study participants. The most prevalent being faculty members ($n = 6$) and peers ($n = 5$).

Table 9

Academic Shame Agents (n = 12)

Eliciting shame agent	Number of study participants
Class attendance	2
Called out	1
Class discussion	1
Course feedback	2
Dismissal	1
Faculty	6
Mentor	1
Peers	5
Policy	3
Research project	3
Sunday test-taker	1
Supervisor	1

As depicted in Table 9, experiences with faculty were also associated with feelings of academic shame for nearly half of these MS2s. For example, a study participant stated, “So we have had a couple of instances where professors have come in saying this is so easy; how do you not understand this? It’s pretty much a quote” (MS Interview 1, Aug. 1, 2019). This example reflects a perceived judgment about the complexity of the information and the learners, which may illicit feelings of academic shame in MSs. A different study participant shared,

> If they want people there, I wish they would just be like, “It's great to see you guys, let's go,” versus, “Well, where's the rest of you,” or, “How many people are in your class again?” I don't know; we get so many versions of the like, “Why are there only eight of you here?” . . . It's just like a passing statement but it's like every single class and then it makes me not want to go to class even though I like going to class. Then if it's on a recording—I don't think they're always. They always—sometimes they say it before the recording starts but if it's on the recording, then everybody who's at home is like, “Oh well, this person is just

> annoyed that we're not there, I guess." I just don't think that's productive for anybody. (MS2 Interview 1, Aug. 30, 2019)

This reflection captures how the language used by faculty before or after class may elicit feelings of academic shame. Finally, another MS2 shared,

> I think sometimes in [course name] there could be a bit more of a supportive, encouraging, positive feedback environment. Sometimes I felt like we had a lot going on in the faculty and the facilitators didn't really have an appreciation for that. I think sometimes having someone say like, "I know you have a lot going on right now," can be helpful. (MS2 Interview 1, Aug. 7, 2019)

This instance reflects a perceived lack of empathy from some faculty and facilitators. This example is noteworthy, as "empathy creates a hostile environment for shame -it can't survive (Brown, 2007, p. 32). In addition, this example suggests an imbalance experienced by this study participant in the feedback provided by faculty. Along those lines, another MS2 added the following:

> I've talked to other people who their [course name] faculty is just really short with them and can't say anything positive. Well that's not really the purpose of— I understand that you're here to help us be better doctors, but it's not just about criticism. It's also about these are the positive behaviors that you're doing as far as like a doctoring chain. (MS2 Interview 2, Aug. 8, 2019)

Again, this quote reflects a perceived imbalance in the feedback provided to MSs. In short, these examples illustrate how some study participants believed interactions with faculty members may invoke feelings of academic shame.

Not only interactions with faculty may elicit feelings of academic shame, but also casual interactions with peers. For example, a study participant shared,

> One of my classmates told me that she had not achieved a 90% on the last exam that we took. I was really happy that I had gotten a 75% because that was what I was aiming for on that exam. And then, I thought, "Oh, my gosh. I didn't get a 90% on this. I should have gotten a 90% on this." (MS2 Interview 2, Aug. 13, 2019)

This example illustrates how talking about academics with other MS2s may elicit feelings of academic shame. Another MS2 shared feelings of academic shame may be elicited by peers in the cohort behind them (MS1s) as well. This study participant added the following:

> I think that's hard, and then also with this new class they are really gung-ho, and I feel like they are making me feel ashamed of what I'm doing for step because some of them are like, "Well, how's your step studying going?" And I'm like, "Well, it hasn't really started yet. I'm figuring that out." And I feel like they're just really eager and ready to go and it makes me feel kind of uncomfortable and insecure about where I'm at. So that's been a challenge this year too, just feeling like a little extra pressure from the first years. (MS2 Interview 1, Aug. 7, 2019)

Although these examples involved conversations between MSs, the following examples demonstrate how even observations of peers may also elicit feelings of academic shame. One study participant shared, “I was on a group trip with some classmates, and some people in the group were doing their Anki cards while we were on the trip” (MS2 journal, September). Similarly, a MS2 noted, “I see my peers getting through material much quicker than I can" (MS2 journal, October). In these instances, the study participants noted how observations of their peers invoked feelings of academic shame.

Although these types of academic shame triggers varied from MS2 to MS2, they collectively revealed the presence of a potential sources of academic shame. The following section describes several different types of “measuring sticks” that also reflect the presence of possible academic shame triggers.

Different measuring sticks. This category reflects a collection of academic shame triggers that were invoked by different measurements used in valuations of self. *Measuring sticks* was an in-vivo code that emerged in the qualitative data, meaning this code was a term used by a study participant over the course of an interview. These

measuring sticks reflected the study participants' beliefs about actual assessment metrics, comparison with near peers, a fear of missing out, or falling short of one's expectations. In this sense, these academic shame triggers were perceived as more objective in nature. Moreover, this category captures how distorted perspectives are closely associated with feelings of academic shame. In each of these cases, the measuring sticks reflected the notion of scarcity as described by Brown (2012).

Step 1, the first national board exam that MSs take in medical school was the most notable measuring stick and identified as an academic shame trigger by these MS2s. In fact, all 14 study participants spoke about Step 1 as an academic shame trigger over the course of the interviews and study journals. One study participant shared the following:

> Because it's really used as the universal measuring stick for all medical schools and matching, this is a precarious career where you need to play favorites, or you need to be favorable in the eyes of others to go and live or you want to live even. I mean, adults don't choose jobs like that, but we do have to do that. And we are adults, so it's a very precarious situation and the single most important factor in determining that is going to be your Step 1 score as far as outweighing the rest. (MS2 Interview 1, Sep. 9, 2019)

On a related note, a different MS2 commented on the gravity of Step 1 during the second year of medical school. This study participant stated,

> Yeah, so I mean we're all here because we're really intelligent and one it's hard I think because you might have gone from being really, really smart in your class to middle or lower. Now that you're in a class of 79 other really, really intelligent people. And nobody knows what your scores are in school for the most part, except if you take Step you know where you sit. For things in that because it also determines what specialty you have the ability to now get into. It can make you feel like, "Oh, well I only have the scores to get into like Family Medicine or I'll never be a surgeon." (MS2 Interview 1, Aug. 8, 2019).

Finally, another study participant shared,

> Just from our perception, even though we're told by the learning specialists and by our advisers that your Step 1 score is only one part of your application, in the same way that when you're a medical premed and applying to medical school, everyone tells you that the MCAT is only one part of your application, but you're going to hyper-focus on it, because it's a number and that's the way you're taught. You know? . . . You recognize there's limitations to this number, but you still focus on it anyways, because that's just how you're taught as a premed, I think. (MS2 Interview 1, Aug. 6, 2019)

One of the MS2 put it simply, "I think the biggest challenge probably is Step; I think that's kind of what feels like the theme of the year" (MS2 Interview 1, Jul. 30, 2019). Step 1 and readiness to work associated with it repeatedly emerged in the student journal responses. For example, one study participant shared, "I may not be smart enough to do well on STEP, and I feel like my brain is failing me" (MS2 prompt, November).

These instances reveal the prevalence of this particular academic shame trigger, as well as the weight that the first board exam has on a perception of self and future. Another a study participant explained how scores on board exams become connected to how she would think about herself. This MS2 stated,

> I think at least for myself personally, I begin to tie the value of the board exam with the value of myself and that I can show people my value based on those board's exam. I think that creates a challenge to learn how to connect yourself to something that is an arbitrary number and also learn how to disconnect yourself at times to say that value isn't a value of me, it's just a number and how to navigate that I think is a challenge at times. (MS2 Interview 1, Sep. 9, 2019)

Another study participant described other sources of measurements, such as "Not getting a certain percentage on an exam. Not having completed as many Kaplan questions as a classmate. Having to repeat the OSCE [Objective Structured Clinical Examination]" (MS2 interview, Aug. 13, 2019). These examples depict feelings often associated with Brown's (2012) notion of scarcity. Along those lines, another MS2 shared the following:

> I started doing a ton of the Kaplan questions and I was getting 20 or 30% on them and it just made me feel really bad about myself and all of the stuff that I

> forgotten. And also taking the [diagnostic name] and seeing that I fell below class average, I was okay I still got the 50% that that was the goal and I really shouldn't compare myself, but it's really hard not to compare yourself when you're literally given the comparison. (MS2 Interview 2, Aug. 8,2019)

This instance depicts how both numbers and comparison often go hand in hand for MSs as they relate to feelings of academic shame. Furthermore, the qualitative data suggested that comparison between MS2 happens regularly. For example, a study participant stated,

> I mean, for the beginning, there's such a learning curve associated with medical school. I think it's really hard because it's a lot of high-achieving students who are used to being the most high-achieving student in their class, and now you put all of these super type-A, high-achieving people all in one room, and it's really easy for them to compare themselves to each other while they're all jockeying for social positions and also just trying to get a feel for everything. It's a lot of just waiting for the dust to settle. And then, it feels like once the dust settles, [course name] starts. (MS2 Interview 1, Aug. 13, 2019).

Another MS2 described that the nature of the self-talk, that comparison invokes, is seldom positive in nature. In other words, it comes from a not good enough perspective. This MS2 described this inner dialogue as follows:

> Usually, when you're measuring someone, when you're comparing how you measure up to somebody, it's always because you think you're worse than them. You're never like, 'Oh, I'm so much better than that person. I'm doing this thing and this thing, and they're not even doing that thing and that thing.' Or, at least for me, it's because I think that person is doing so much better than me. (MS2 Interview 1, Aug. 30, 2019)

Finally, a study participant summarized the prevalence of comparison as "Every day is a reminder of where you stand in that hierarchy, I guess you could say or do you know less or more in your perception of are you far enough along compared to somebody next to you" (MS2 Interview 1, Sep. 9, 2019). While comparison was widespread in the experiences the study participants shared, so was falling short of one's own expectations. Several of the journal reflections highlighted this notion. As an illustration, one MS2 stated academic shame occurs when "I don't meet personal goals I set for myself, low

grades on exam, inability to get additional help when I feel like I don't need or if I just wait" (MS2 journal, October). Another MS2 added they that he or she felt shame "when I don't meet a goal that I've created for myself. Such as not getting a score over 80% on an exam or not having the time to wake up early so I can't make it to class on time" (MS2 journal, September). Finally, an MS2 spoke about falling short of his expectations and those he believed others have for him. He stated, "I have an expectation for myself and my friends also have an expectation of me, either consciously or subconsciously, to have a certain academic standard and to not meet that goal is shameful" (MS2 Interview 1, Aug. 1, 2019). In addition, a fear of missing out (FOMO) was another type of measuring stick described by these study participants. FOMO as it relates to studying was another in-vivo code that emerged in the qualitative data. One study participant described it as:

> it's like you see one person doing something, and then for me I kind of feel like everyone is doing more than me, but it's hard when I'm seeing one person doing this thing and one person doing this thing. But in my mind, I put it all together and the sum of that is that it feels like everyone's doing so much more than me, which probably isn't true, but I feel like Anki is one of the biggest reminders to me. I'm like, 'People are doing more than me. I need to be working harder, doing more than I am.' (MS2 Interview 1, Aug. 7, 2019)

A different study participant added the following:

> If I'm at a dinner with my family or whatever, I'm sitting there thinking, 'Well, I could be doing Kaplan questions. I could be doing Anki cards. I could have brought my First-Aid book with me and read it in the car on the way here.' Yeah, it's an uncomfortable feeling because I do want to be present and involved in my life for my own good and also just to maintain the relationships around me, but Step study is sort of that constant little voice in the back of my head that says, "Hey, remember me? I'm important." (MS2 Interview 1, Aug. 13, 2019)

These examples reveal how a FOMO related to studying reflects the presence of another measuring stick. This measuring stick suggests that a good medical student would be

doing more and should be studying all the time. If you are not meeting this standard, then you are not a good medical student. One study participant described this as

> something I have talked about is kind of the air, the air we build in our community of . . . always doing something to forward your career and studying and doing something and creating this kind of air of always working. (MS2 Interview 1, Aug. 1, 2019)

This culture of busyness reflects a belief that MSs are always studying or working, which may perpetuate a FOMO.

As noted, this category captures distorted perspectives acknowledged by the study participants. More specifically, these reflections illustrate one's inaccurate perception of self and others. These distorted perspectives are additional forms of a measuring stick. For example, one study participant shared,

> When I was a first-year, I remember looking at the second-year students and thinking they really have it altogether, they are doing so well, they are really smart, there is no way they are not doing well in their classes or struggling in any way. (MS2 Interview 1, Aug. 1, 2019).

This instance captures how this MS2 believed that other MSs had it all together. Similarly, a different study participant stated, "I feel like outwardly my class is really good at looking very pulled together, and it feels like sometimes when I look around at everyone that they have it all figured out" (MS2 Interview 1, Sep. 9, 2019). On that note, an MS2 stated, "You respect a lot of people in your class. You look up to people in your class. You always think, 'Oh, this person's got it all together'" (MS2 Interview 2, Aug. 13, 2019). Finally, another study participant reflected on their distorted perspective of others and shared, "There are lots of different people here who I have—X,Y, Z— not negative things about them, but I really conceived them a certain way and they are just a totally different person" (MS2 Interview 2, Aug. 8, 2019). Again, this example illustrates

how a distorted perspective may elicit feelings of academic shame. In other words, it reflects the belief that everyone one else is amazing and do not experience challenges; therefore, there must be something wrong with me.

This section illustrates examples of the various academic shame triggers that may take the form of different types of specific shame eliciting agents or measuring sticks. In summary, this theme depicts the "how it works" or function of academic shame triggers. In other words, using a medical analogy, the study participants shared examples of the physiology of academic shame triggers. The following describes how the ASRT served as an opportunity to normalize these experiences and created a learning community to talk about feelings of shame openly at the COM.

Turning the Spotlight on Academic Shame and the Value of Vulnerability

The ASRT served as an opportunity to normalize feelings of academic shame by providing the safe place to talk about the feeling and an opportunity to practice vulnerability. This theme was composed of one category that led to this assertion. This category reflects having the opportunity to expose shame and practice vulnerability. The following section describes the category and provides support for the themes.

Exposing shame. This aspect of this category reflects the notion of acknowledging shame and a willingness to show one's own imperfections and to talk about feelings. As noted, the ASRT created the space to normalize feelings of shame and academic shame. One study participant stated, "Particularly in medical school. I was very surprised when we were doing the boards of things that cause shame both personal, academic, and all the areas we covered. A lot of those things I was like 'Oh that's me too'" (MS2 Interview 1, Aug. 1, 2019). This aspect of this code category reflects the

notion of acknowledging shame, and a willingness to show one's own imperfections and to talk about feelings. As noted, the ASRT created the space to normalize feelings of shame and academic shame. One study participant stated, "Particularly in medical school, I was very surprised when we were doing the boards of things that cause shame both personal, academic, and all the areas we covered. A lot of those things I was like, 'Oh that's me too'" (MS2 Interview 1, Aug. 1, 2019). This study participant added that

> I feel like shame is [before the workshop] very isolating and now it's almost communal. It's a little cathartic knowing that everyone's going through this and everyone's feeling like that. It's not nice to know everyone is feeling bad like that, but it's nice to know that we are all kind of in this together and we can all make it better, somehow. (MS2 Interview 1, Aug. 1, 2019)

This quote reflects the shame's isolating nature, as well as how talking openly about the feeling normalized the frequency of feeling academic shame in medical school. Similarly, another MS2 shared,

> For one, it's normalized them for me. I don't feel like I'm the only person who feels ashamed of having not achieved my own obscenely high expectations. That's been really nice, just to be able to sort of open that door to be able to discuss that with my classmates has been really helpful because, again, what we learn is that shame is a very isolating thing. To be able to share with somebody that you didn't do well on something or for them to be able to share with you that they didn't do well on something has been very nice because for a very long time a lot of us felt like, "I was the only one who did bad on that, so I should be ashamed of myself." In reality, that's not even close to the truth. (MS2 Interview 1, Aug. 13, 2019)

Finally, a different study participant noted,

> I think it was like a very strong experience to normalize those feelings of shame and normalize those responses. Kind of realize it's very normal and I think that's comforting. I guess a lot of the feeling of shame is feeling like you're alone in it but knowing that everyone is kind of feeling the same thing, you know, mitigates it in a lot of ways. (MS2 Interview 1, Jul. 30, 2019)

Each of these examples illustrate how feelings of academic shame were normalized by engagement in the ASRT. The following section provides evidence of how participation

in these workshops fostered a willingness to be more vulnerable and comfortable talking about their feelings.

Practicing vulnerability. The ASRT also provided a space for study participants to practice vulnerability by creating a learning experience in which it was okay to show one's imperfections. To reiterate, for the purpose of this AR study, *vulnerability* was operationalized by Brown's (2012) definition of the term, which stated it reflects "uncertainty, risk, and emotional exposure" (p. 34). Contrary to the hidden standard in medical school that suggests MSs must be perfect, the ASRT provided an opportunity for the counter-narrative that normalizes the fact that no one is perfect. This shift was accomplished by the study participants' willingness to experience "uncertainty, risk, and emotional exposure" (Brown, 2012, p. 34). For example, one study participant shared the following:

> I think it was also very enlightening for me to hear everyone, especially when we did the board-breaking exercise and we all shared what we had written on the board, because that was specifically an academic shame hotspot. I thought it was so interesting to hear what other people said, because I wouldn't have known that about a lot of people, and I think it was helpful to see that many of us had very similar academic shame triggers or just feelings of shame around academics. It made me feel more connected and less alone in those feelings. (MS2 Interview 1, Aug. 7, 2019)

A different study participant stated, "An interesting part of that workshop was being able to be vulnerable around people that are being vulnerable. So, it was like having permission to be vulnerable in a sense. And that was really beautiful" (MS2 Interview 1, Sep. 9, 2019). Similarly, the ASRT fostered a willingness to talk about their feelings with others who participated in the workshops and with those who did not. For example, one MS2 stated, "That's been really nice, just to be able to sort of open that door to be able to discuss that with my classmates has been really helpful because, again, what we learn is

that shame is a very isolating thing" (MS2 Interview 1, Aug. 13, 2019). On that note, another study participant shared, "I have actually talked to people outside of the group about feelings of shame since the activity. It's helped me kind of not feel as uncomfortable about bringing it up to other people" (MS2 interview, Aug. 12, 2019). Along those lines, another study participant commented,

> I think, I mean it's hard because I feel like I'm so low on the totem pole right now, but I guess talking to classmates and just sharing experiences and having some solidarity with them and letting them know like, right, if they have something similar, kind of relating to that and trying to empathize and make them realize maybe that's normal to feel the way they do, but also that it's something we can change. (MS2 Interview 1, Aug. 8, 2019)

Finally, a different MS2 summarized the notion of practicing vulnerability by saying:

> And to be vulnerable like that, I think took a lot from you emotionally, but this training was a good reminder that's like, you kind of have to be vulnerable and with the universe it will usually turn out well and not like shame can't be, you can't survive being spoken. Me taking that opportunity to be vulnerable is me taking the opportunity to help myself feel better. (MS2 Interview 1, Sep. 6, 2019).

This example reflects the power of vulnerability and that by modeling it during the ASRT was seen as beneficial. In short, this action researcher needed to be willing to practice vulnerability, if he was encouraging and asking the study participants to do the same.

In conclusion, these examples illustrate how the ASRT puts a "spotlight on academic shame" by normalizing the feeling, creating a safe place for the study participants to practice vulnerability, and by fostering the discourse about the feeling among study participants and beyond to other peers. The next section illustrates how the ASRT promoted shifts in these MS2s' self-efficacy of shame resiliency practices.

Changes in Self-efficacy of Shame Resiliency Practices

The ASRT promoted changes in self-efficacy of shame resiliency practices and fostered awareness of inherent challenges to practicing these practices. This theme was

composed of two categories of codes that led to this assertion: (a) practicing the practice, (b) adaptive responses, as well as, one specific code (c) challenges to these practice. The following describes each of the supporting categories and code.

Practicing the practices of shame resiliency. This category reflects areas of change in the study participants after their engagement in the ASRT. These changes include a variety of specific cognitive and behavior changes, shifts in one's outlook and the ability to label other responses as maladaptive responses to feelings of academic shame. For example, one study participant shared,

> Mostly, because I feel like I have way better tools to identify shame when I am feeling it than I did before. I guess I have a lot more shame in my life than I thought. Identifying it is definitely the first step and I am also able to identify my bad responses. (MS2 Interview 1, Aug. 1, 2019)

This study participant added the following:

> Yeah, that's the really big one for me. I feel like in order to fix a problem you have to recognize what's going on. I feel like prior to the workshop my response to not doing well on an exam would be to just continue what I'm doing and maybe blame the professors or blame other people for. that's the reason why I didn't do something well; but I feel like afterwards it's more identifying I either need to—I need to reconcile my own expectations of myself and put them into a more realistic perspective. (MS2 Interview 1, Aug. 1, 2019)

On that note, a different study participant noted,

> I recognize my shame triggers. I recognize way more. I just recognize my negative self-talk. I think more about what I'm telling myself, and what my brain's telling me about myself. I feel like I have healthier ways of combating that now more so just because I can recognize it. (MS2 Interview 2, Aug. 13, 2019)

Furthermore, another MS2 commented,

> I think that I've been able to justify putting time towards mental health now way more so than before because I feel like all the other aspects of studying, and preparing, and especially studying for Step 1 just go better when I'm in a better mental state, and when I'm not being so negative with myself. (MS2 *Interview* 1, Aug. 13, 2019)

These examples illustrate changes in how the study participants were thinking about this feeling and how they were responding to it after the participation in the ASRT. Similarly, a study participant stated,

> I think that helped me be more productive, rather than being like "ugh this is something I feel bad about, I don't really want to do anything about it." And me being more aware and being like, "Oh, this is a shame feeling, I shouldn't just like shut it out, I should be like okay that's fine, back to work. Let me do something about it." And I think that was more productive. (MS2 Interview 1, Sep. 9, 2019)

Again, this instance suggests an increased sense of self-efficacy in responding to feelings of academic shame. Another MS2 shared how the ASRT influenced their outlook:

> Going back to the self-confidence, I think I feel more assured in my ability to succeed in the medical field and a little bit more optimistic that I can do whatever residency I decide I want to do without feeling like I'm not going to get a good enough step score to do whatever I want. (MS2 Interview 1, Aug. 7, 2019)

Along those lines, a different study participant shared,

> I felt pretty good in my abilities to do that. I feel like I know what the resources are, and I know who to reach out to. And for me that seems to be half the battle. And I've had positive responses from doing those things. So now I kind of like have that positive feedback loop of like, "Oh if I'm feeling bad and I do this, it's helpful." (MS2 Interview 1, Aug. 6, 2019)

Other study participants discussed how learning about shame influenced how they interact with their classmates. For example, one study participant noted,

> I think it's made me be a little bit more sensitive in talking about the way I study. In terms of–I never talk about my grades or my performance to other people, because I've always realized that that is a source of shame for others, when you compare against people who might be doing just as well as you or worse than you or better than you. It doesn't matter. Everyone responds to it in a different way, so I don't do that. (MS2 Interview 1, Aug. 16, 2019)

Although these examples illustrate changes in the ability to practice the practices of shame resiliency, these MS2s also described a range of new adaptive responses to feelings of academic shame. The following section provides evidence of these specific changes.

Adaptive responses to feelings of academic shame. Study participants discussed numerous adaptive responses to feelings of academic shame after participation in the ASRT. For example, one study participant shared,

> It's, I think helped in a way of allowing myself to pause and have reflection. It's given me this new opportunity to be able to say, "You're feeling this way or why are you feeling this way? Is it something that you're thinking about yourself? Or is it something that someone else did?" And through those reflections I can choose how to cope with the shame, or I could choose how to cope with just any of those feelings in general, like beyond shame. And I can go back to what my mom always says is like, "What do you want out of the situation?" I can help guide myself through those situations now. (MS2 Interview 1, Sep. 6, 2019)

Another study participant shared:

> I have a support system set up for myself. So, I'm able to share things with a peer or a roommate and definitely bring it up during my [counseling center name] discussions to see what the next best steps would be to make sure that shame is not a problem for me. (MS2 Interview 1, July 31, 2019)

This example highlights new help-seeking behaviors. Similarly, this MS2 shared,

> Like I've met with my learning specialist more and I've heard other people talking about, "Oh, I met with my leaning specialist and I felt like this wasn't working, and then I met with him again." Then I've been going to the gym more and I think– So, I've been trying to find things that are better, and I've also started going to the [counseling center name] as well. One of the things that I said, because they asked why I was there. I was just like, "It's just different stuff and I just have to find new ways to cope with it." (MS2 Interview 1, Aug. 30, 2019)

Data from the student journals provided further evidence that the study participants were able to employ shame resiliency practices over time. For example, one MS2 shared how they responded to academic shame triggers three months after their participation in the ASRT. This study participant described the response as "first by recognizing their existence. Second by trying to recognize and understand that these feelings are not going to help me succeed" (MS2 journal, October). Similarly, another MS2 responded by "reminding myself where they are coming from, listing things that I am good at and

things I am grateful for, and meeting with a therapist. I'm glad to now have healthy tools to respond to those feelings because I know they will keep coming" (MS2 journal, October). Likewise, a study participant described a response to the feeling of academic shame:

> At first displacing the feeling saying, "They thought I am dumb, but they do not know who I am as a person." I used this reflection to remind myself that I am good enough and I am smart and if I feel like a person is judging me or that I feel shame, that I am smart and really hard working. It helps to share with a friend my feelings about how I feel in situations where a person makes me feel dumb because it allows me to remind myself that I am very competent and that if they make me feel that way, it likely stems from them not knowing me well enough. (MS2 journal, October)

Although these examples highlight a variety of adaptive responses to feelings of academic shame after participating in the ASRT, other of these MS2s talked about their ability to adjust their expectations better and be gentler on themselves. In fact, 12 of the study participants shared that they were monitoring their self-talk and adjusting expectations of self differently after participating in the ASRT. For example, a study participant stated, "Reminding myself that I am human and that I did my best with what I was given" (MS2 journal, November). On that note, another MS2 shared, "As stress increases it gets harder to remind myself that shame is normal and that I am smart and am on the right track" (MS2 journal, October). Finally, six study participants shared they were pausing and taking a break when they experience feelings of shame, stress, or anxiety. These examples illustrate how their new awareness and understanding of shame allowed them to respond more adaptively to ongoing challenges and new academic shame triggers. These instances contrast a variety of maladaptive responses that study participants were able to label as such after engagement in the ASRT. For example, one MS2 shared,

> I think that one of the things that I do is, when I feel like there's too much to do, I won't do any of it. I have definitely an anxiety-avoidance type of personality, and I think that there are probably other classmates who respond in the same way. I think also another thing that I do is when I am avoiding something, I'll add other things onto my plate so that I can't do that thing that I'm avoiding. Anxiety avoidance, over-scheduling, over-commitment, and I think probably some other classmates do that as well. (MS2 Interview 1, Aug. 30, 2019)

Along those lines, a different study participant noted, “I'm definitely someone who likes to procrastinate or do something that's so far unrelated to school that it just completely takes my mind off of it” (MS2 Interview 1, Aug. 12, 2019). Another M2s described habits of compartmentalizing:

> I think that's a lot of compartmentalization. You have to do that. You need to find a way to not think about the things that are going to weigh you down. So, it's a lot of suppression, I believe, which I think it's synonymous of compartmentalization. You suppress an emotion or what you're thinking or feeling or fear. You got to just put that aside so you can focus on a task at hand. You have a certain compartment to do that with. I think some people have bigger ones or smaller ones or some need to do things to clear it out personal activities and things of that nature to help balance it, but then there's just no equation that will balance the amount of suppression that you have to go through I believe in med school. You literally have to change yourself. (MS2 Interview 1, Sep. 9, 2019)

Unfortunately, as noted in Chapters 1 and 2, these habits of self-denial may contribute to feelings of academic shame. Recall that individuals learning medicine become adept at delaying their own needs and often utilize task-focused mindsets to manage the challenging demands (Miller & McGowen, 2000). Again, these examples of maladaptive responses reveal shifts in self-efficacy of these shame resiliency practices. Although the data revealed how study participants were employing shame resiliency practices, these MS2s also discussed challenges to their implementation.

Challenges to practicing shame resiliency. As noted, Brown’s (2012) SRP provides a pathway for moving away from feelings of shame. However, having a pathway does not mean the process is easy for MSs. For instance, a study participant

noted when encountering an academic shame trigger, “A lot of times it's unexpected. So, you never know. It's almost like kind of like defensive driving” (MS2 Interview 1, Aug. 8, 2019). Another study participant shared how energy influences the ability to respond more adaptively to feelings of academic shame:

> Yesterday, for instance, I didn't have a good night's worth of sleep. I woke up, and I was just a cranky monster mess. Just generally not a nice person yesterday. So, days when it's like that, where it's like I'm already dealing with something that's already low-low back, where I already feel like I'm behind so to speak, that I'm tired and I'm cranky and I feel like I need a break. Those days it's a little bit more difficult because it's easier for me to be like, "Well, I just don't feel good," and I can almost wallow in it. Yesterday was an interesting sort of test of that. Do you wallow in it, or do you do something about it? (MS2 Interview 1, Aug. 13, 2019)

A different study participant described another type of challenge, which suggests an almost default setting when responding to feelings of academic shame:

> I mean I think, my instinct is still the maladaptive response. I think that's probably true for a lot of people. I know for me I tend to shut down and ignore something or just go straight to feeling mad and lashing out. And I think it's just made me a little more aware of "Oh, this is what I want to do." And then now I know what should I do instead and kind of strive towards that. But I think it's a continuum of- I think still make that instinct is like the easier response. But I think knowing that's what's happening. Yeah, I'm a lot more aware. (MS2 Interview 1, Jul. 30, 2019)

This instance illustrates how these internal default settings are challenging to mitigate. An added response was “Gosh, I guess just habit. Also, it's not even super conscious. It's like a reflex. And I feel like it takes more thought to have a more adaptive response” (MS2 Interview 1, Jul. 30, 2019). Another MS2 shared a similar challenge:

> Yeah, I think that I have a lot of different stuff in my toolbox that I can use but it's really-sometimes it's hard to pull those things out. It's so easy to either—I'm really good at putting things in boxes and then putting the box in the closet and locking the box away. And that's something that I had been working on. But I think it's really hard to take that step and pull things out of your toolbox and actually use them. So, I'm sure I'll still struggle with things in the future but at least I have that toolbox there for one. I really need to use these things. They're there and I know how to use them. (MS2 Interview 2, Aug. 8, 2019)

Lastly, one MS2 commented,

> I think since I can recognize it better, I may not be doing the perfect thing in response to shame, but I can exercise instead of just going on Facebook or doing something totally unproductive. So, I think it's kind of a nudge in the right direction. I think I would need some more practice and reinforcement to kind of make a substantial change. It's a really powerful emotion, I think. And yeah, so I think it was a good start. (MS2 Interview 1, Aug. 12, 2019)

Again, these examples illuminate that responding to feelings of academic shame is not a one-time event, but rather process orientated. The student journals also captured the challenges to applying these practices. One study participant noted:

> I first allowed myself to feel these feelings of shame because they are so strong and recurrent when I am doing Kaplan questions. Then I remind myself that the purpose of Kaplan questions is to learn from my mistakes, and it is normal to get questions wrong. This kind of shame feels a little more subtle to me because it presents itself more as disappointment/frustration and occurs so frequently since I am doing banks of Kaplan questions every day; that it doesn't feel out of the ordinary. I think that is why it has been a little harder for me to get control of this shame, since I am exposed to the trigger on the daily and don't always recognize it as shame. (MS2 journal, November)

Each of these instances depict different challenges that these MS2s encountered after partaking in the ASRT. Drawing on another medical analogy, the following section discusses "counteragents" to feelings of shame. In other words, these agents may help to mitigate the effects of feelings of academic shame.

Counteragents to Feelings of Academic Shame

Connection and help-seeking are counteragents to feelings of academic shame. This theme was composed of two categories that led to this assertion: (a) connection as a counteragent and (b) help-seeking as a counteragent. The following sections describe each of the supporting categories.

Connection with others as a counteragent to feelings of academic shame. The power of connection emerged from the qualitative data sources. As indicated previously,

for the purpose of this AR study, *connection* was operationalized by Brown's (2010) definitions, which states it is "the energy that exists between people when they feel seen, heard, and valued; when they can give and receive without judgement; and when they derive sustenance and strength form the relationship" (p. 19). For example, one study participant captured this notion by stating, "Reaching out or sharing your experiences with individuals in your same situation enables more connection and builds a more community for growth" (MS2 Interview 1, Jul. 31, 2019). This instance reflects how connecting with others creates opportunities for empathy and community. On that note, another study participant commented,

> So, a big takeaway is just the empowered connection actually with peers, the power of connecting on the things that you're feeling and struggling with, which is maybe a cliché, but shame has never really been a focus or a center point of those connections before. And it's very unique that it was and that's a huge takeaway, just how that can help the chain. (MS2 Interview 1, Sep. 9, 2019)

A different MS2 described a similar experience:

> I guess some of my big takeaways were that everybody has things that they don't talk about. And you don't see that from the outside, especially when they did like the wood chopping exercise. You really kind of see that everybody has things that they're struggling with. And when you're feeling shame you don't think about the things that other people are doing, you think about what you're doing. But opening that up and getting the perspective of other people and seeing what they go through kind of helps you put your struggles into perspective as well. And I think it makes it more okay to rely on other people or to at least to share with other people and find positivity in the common ground that you have. Whereas, with shame you don't do that, and you suffer because of it. (MS2 Interview 2, Aug. 6, 2019)

The data suggested that study participants experienced the benefit of connection with others through their participation in the ASRT. A different study participant summarized this claim:

> It's made me realize this. It's extremely essential and important. There is something I felt with my peers and going through that and talking about those

> things; that was a feeling I haven't had before. It was really great for me to be able to do that and I couldn't have done that unless you held the workshop. (MS2 Interview 1, Sep. 9, 2019)

Moreover, the study participants understood the importance of connection had as they contemplated future experiences. One study participant described this significance as “If we're able to connect our experiences with those of others that any feelings of shame starts to dissipate over time and so we start to focus more on the positive outlook and that becomes more of an encouragement and a motivator” (MS2 interview, Jul. 31, 2019). Data from the student journals provided further evidence that study participants were applying this new understanding over time. For example, a study participant wrote,

> Talking to friends about it, reminding myself I am human and need breaks too, and/or reminding myself that I did get other things done that day. I think that doing this seminar reminded me that I wasn't alone in these feelings, and that if you share them, they won't feel so intense. (MS2 prompt, September)

Another study participant’s journal entry described responses to feelings of academic shame:

> Initially I responded with tears. Then, when the tears faded, I decided to stay up late and study. Probably not my best coping mechanism day, but it is what it is. The next day I spoke to one of my mentors about it and he gave me advice based off of medical school students he has interviewed who have failed Step, and how fourth year medical students feel about Step now that it was over. (MS2 journal, November)

Again, each of instances provided evidence that the study participants were actively reaching out to others ways to counter feelings of academic shame after participation in the ASRT. In these examples, study participants reached out primarily to established networks, such as friends or classmates. One study participant engaged a faculty member in a conversation about shame. The data also suggested that MS2s reached out and connected with partners or family members. Finally, this theme reflected a new

willingness to talk about all of their feelings with others more openly. For example, a study participant noted,

> Yeah, I'm trying to be a lot more open with my emotions and how I am feeling. Not just necessarily shame I feel like all of them. That's something I have been working on for a really long time. However, I feel like the workshop kind of accelerated that progress in a way. Specifically, with the exam and in my own personal life I feel like talking about my emotions and talking about my feelings, though it can be difficult and scary at times, is what these—the best way to put it is that I can sleep better at night. So, it is just more, I guess, comfortable. I feel better about myself at the end of the day. I have less anxiety. (MS2 Interview 1, Aug.1, 2019)

On that note, another MS2 stated, “I'm just trying to make a concerted effort to be more open when I'm feeling upset or not upset, but a little blue about something” (MS2 Interview 2, Aug.6, 2019). Although this section broadly depicts the power of connecting with others, the following specifically exemplifies the influence of the ASRT on specific help-seeking behaviors.

Help-seeking as a counteragent to feelings of academic shame. For the purpose of this AR study, *help-seeking* was defined as a form of connection. The following illustrates how the MS2s think about help-seeking after participation in the ASRT or how they sought help as a counteragent to feelings of academic shame. For example, a study participant captured how they thought about help-seeking before and after participation in the innovation:

> It's definitely opened me to the idea. I'm not particularly, especially in terms of like psychiatric health or counseling—It's weird. I really like talking to people about their problems and just being vulnerable with people, but I have this fear of doing it myself, so it's definitely opened me to the idea. I'm more willing to give it a shot. But most of the time I think, "Oh. I'm self-reliant. I can figure this out," and I think, to a certain degree, it's true. That's just kind of how I've always been, but there are moments when I have had to rely on my friends and family to get me through certain times, and I can definitely see a space where friends and family might not be enough. I'd be willing to seek professional help if needed. (MS2 Interview 1, Aug. 6, 2019)

Another study participant shared,

> When I first took the first workshop, I understood what I was experiencing as shame and I recently started utilizing the [counseling center name] offered by the school and I had a discussion with the counselor about the concept of shame and how that may have played a role in my anxiety. (MS2 Interview 1, Jul 31, 2019)

Again, this quote identifies a specific change in help-seeking behaviors. Along those lines, a MS2s stated,

> I think one of the things that I've done that I might not have done before is going to the [counseling center name] because I feel like I'm pretty happy and balancing things pretty well. I know when I'm watching too much TV and I figured out how to stop doing that but then, I don't know what's going to come in the future. I don't necessarily know if I have all of the resources and tools that I need, so I'm kind of thinking ahead with that, where I can build up new tools. (MS2 Interview 1, Aug 30, 2019)

In addition, this MS2 described the counseling service as “proactive, yeah. Instead of reacting after the fact. Being proactive, just to be more prepared” (MS2 Interview 1, Aug 30, 2019). Even though many of study participants shared they were now more open to going to the counseling services provided by the COM, participation in the ASRT prompted two of these MS2s to actually begin using this resource. For instance, a MS2 shared in a journal response, “I have avoidance behavior during these feelings of guilt, so I've started utilizing [counseling center] to share these experiences with a professional” (M2S journal, October). Several study participants reported they were already using resources provided by the COM; participation in the ASRT reinforced the importance of this type of help-seeking. More specifically, five study participants began talking about feelings of shame with their counselor. For example, a study participant stated,

> Its influenced it positively. Seeking help has been something that has been one of my goals in medical school since I started. And I always try to seek help when I can, but that was really the thing that I wanted to work on. And the workshop has just kind of kept pushing me in that direction. (MS2 Interview 2, Aug 6, 2019)

Once more, this example illustrates the positive influence the workshops had on this student's beliefs about help-seeking.

In summary, this section highlighted how participation in the ASRT either reinforced or changed how these MS2s thought about connection and specific help-seeking behaviors. Connection and help-seeking are counteragents to feelings of academic shame. However, there are environmental, cultural, and professional challenges that may conflict with or inhibit with these counteragents. The following section further illustrates these challenges and opportunities in medical education, specifically as it relates to the COM. In addition, this section highlights elements of the COM and ASRT that may be beneficial in reshaping these environmental, cultural, and professional challenges.

Challenges and Opportunities for Minimizing Feelings of Academic Shame and Fostering Shame Resiliency

There are opportunities for macro- and micro-level changes in practices to minimize feelings of academic shame and further foster shame resiliency in medical students at the COM. This theme was composed of three categories that led to this assertion: (a) high expectations and perfecting; (b) challenges needing to be negotiated; and (c) enhancing our culture. The following sections describe each of the supporting categories.

High expectations and perfecting. Throughout the course of Cycle 3, the study participants shared their perceptions of medical education as it related to feelings of academic shame. One study participant stated, "I feel like a lot of the structure of school itself is right for feeling shame. You're in here, in an environment where you're

comparing, you're being compared. I think that makes it really easy to compare yourself to others" (MS2 Interview 1, Jul. 30, 2019). This example depicts an academic shame trigger in the form of comparison, a type of measuring stick previously revealed in the data. Earlier in these findings, another identified measuring stick was falling short of one's expectations. On that note, one study participant described herself and her peers as "we're still super type A personalities who want to be perfect" (MS2 Interview 1, Aug. 30, 2019). Similarly, another MS2 added, "I feel like medical students really don't want to talk about the shame because we're supposed to be perfect and well if I admit that I'm not perfect, then that opens a whole jar of worms" (MS2 Interview 2, Aug. 8, 2019). These examples reflect a goal of perfection. However, MSs will fall short of this metric. The notions of high expectations and perfection continued to arise in the data as several study participants talked about the field of medicine. For example, one MS2s described this culture as "there is so much we are supposed to be perfect and that people will go out of their way to hide, not being perfect and just understanding that and then trying to figure out a way to have that conversation" (MS2 Interview 2, Aug. 8, 2019). To complicate matters, another MS2 stated,

> I feel about the medical education experience is that it tends to be, so it's very hierarchal and we tend to eat our own, is kind of what I feel like it is sometimes. Where those above you kind of chew you out on the bottom and kind of, I guess kind of instill those feelings of shame and guilt and embarrassment and all those other ones. (MS2 Interview 1, Aug. 8, 2019)

Finally, one study participant shared this sobering thought and suggestion for the field:

> It's a very flawed career path and that's why there's so much depression and suicide and all that. I mean, is that the way we are taught to go through it or what we're expected to do and what we need to figure out? There's huge disconnect. We need to figure out how to do what we're expected to do and still also maintain that balance internally. That's not a clear path. Nobody knows how to do that. (MS2 Interview 1, Sep. 9, 2019)

In addition, to these notions of high expectations and perfecting within medical education and the field of medicine, the study participants also expressed particular challenges they have encountered as MS2s at the COM.

Challenges needing to be negotiated. It is was no surprise that medical school was filled with unique learning opportunities. Simultaneously present were high-stakes and high-demands placed on these learners. A careful balance of challenge and support were needed for a successful and healthy learning experiences. Unfortunately, when there was imbalance in challenge and support, the learning and wellness of MSs may suffer. For example, one study participant highlighted the ongoing strain of keeping up with competing demands and remaining healthy. This MS2 described this challenge broadly as simply "Finding time to stay sane, to do the things that you like to do while also keeping up with everything that you're doing in school" (MS2 Interview 2, Aug. 13, 2019). More specifically, several study participants explained the challenges that coincide with studying for their first national board exam, Step 1. For example, one MS2 shared,

> Balancing study alongside our regular lecture courses. And then also balancing life with that as well. A lot of us have developed outside interests, interest groups, volunteering, all of that. I actually just had a discussion today with some classmates about how difficult we're finding it to balance all of that and still maintain the stuff that we're passionate about while we're still in school. (MS2 Interview 1, Aug. 13, 2019).

Furthermore, this study participant added:

> Actually, one of our instructors today told us, "Every time you say yes to something, that means that you have to say no to something else," and it's really difficult to say no to Step study in order to watch a Netflix show or sometimes even eat dinner. So, that's sort of something that has recently popped up with a lot of us as we're moving into more rigorous Step study, is saying no to a lot of things when we should be saying yes or vice versa depending on what that thing is, so to speak. (MS2 Interview 1, Aug. 13, 2019)

These quotes reflect the competing demands MS2s encounter, as well as a willingness to sacrifice basic needs for wellness such as eating dinner or downtime. Another MSs commented,

> I think one of the big challenges is that we are now having to shift from adding extra study time for a class that was more structured like Anatomy, to adding extra study time to something completely unstructured, which is our Step 1 study. These are different types of commitments than we had in first year and they require more self-regulation, and self-planning, and that I think is just a different way of doing it. It's a shift from external structure to internal structure. (MS2 Interview 1, Aug. 30, 2019)

Other study participants described how they believed these challenges have impacted their learning. For example, one MS2 stated,

> We've had these really cool lectures on breastfeeding or things that won't be on Step and no one cares to learn about it because everyone's just concerned about their score, which I get because I'm concerned too. But there's other important things that the school does and it just, the stress is just so high that it's hard to concentrate on other things that are also really important for becoming a good doctor. (MS2 Interview 2, Aug. 8, 2019)

A different study participant noted how the fear of not performing well impacted her studies:

> I felt like my anxiety took over the majority of my studies in that it was really hard for me to retain information and really succeed. One of the things that was a factor for studying was fear and failing. So just running on that on fear and failure, it kind of burned me out. (MS2 Interview 1, Jul. 30, 2019)

Finally, one MS2 captured the connection between shame and learning in the journal response. This study participant simply stated, “Shame creates an environment that is not conducive to learning. I now know the importance of recognizing that and trying to take care of it” (MS2 journal, November). Even though the challenges reported by the study participants differed, each example was tied to the high expectations and perfecting associated with medical school. Unfortunately, when MSs inevitably grappled with these demands or an unrealistic goal of perfection, an academic shame trigger was likely to be

present. Although it was impossible to minimize every possible shame trigger, practicing resiliency to feelings of academic shame was achievable.

The following section highlighted aspects of the COM study participants reported being beneficial in minimizing feelings of academic shame, and in addition articulated areas for possible changes in practices through the lenses of academic shame and shame resiliency. Finally, in the following section aspects of the ASRT that these MS2s found most beneficial, as well as areas for improvement are discussed.

Enhancing our culture. The data revealed several attributes of the COM that were perceived by study participants as beneficial for minimizing feelings of academic shame. In addition, these MS2s also identified potential gaps or practices within the system that exacerbated feelings of academic shame. In terms of advantageous attributes, several of these MS2s noted exams being pass/fail or flexible class attendance policies. For example, one study participant shared,

> I think a lot of the things that are already in place make the environment as conducive to learning as possible, like biggest one being pass/fail and mostly voluntary classes, so one that gives people less pressure in terms of academic performance. Your 90 versus your 80 versus your 75 all get the same letter grade. Right? So, who cares? Second, voluntary classes. I think that recognizes people might get freaked out in the classroom. Maybe they don't like that learning environment. They can have another way of learning, whether that's through reading, listening to this lecture outside of class a couple times using external materials and supplementing with it. (MS2 Interview 2, Aug. 6, 2019)

This study participant also commented on the resources and class size at the COM:

> I think having all the support that's already here on campus in terms of learning specialists and tutors and a really close connection just between the class in general, like the fact that it is a small class, I won't specify the number, really helps a lot, because people see each other struggling and are, by and large, are willing to help out. (MS2 Interview 2, Aug. 6, 2019)

Similarly, another MS2s suggested,

> I think we're already doing certain things well. I think the pass/fail helps minimize that shame because you can just take a test and no one needs to know, and you're not ranked at all. I feel like ranking would be a really big source of shame for people. (MS2 Interview 2, Aug. 7, 2019)

This example highlighted how a smaller class size may promote connection and help-seeking. Along those lines, another study participant noted,

> I really like the learning specialist experience and the psychologists, having those two things as resources. And those are, I think, something that are really widely used. And I think that helps. I guess just keeping those programs really robust and making it really clear that everyone basically uses those. And I think those are like really good things that the school does. (MS2 Interview 1, Sep. 9, 2019)

Parallel to this instance, a MS2 noted, "I think us having the learning specialists are extremely valuable. You guys do an incredible job about reaching out to us, letting us reach out to you and creating an extremely safe space for us to share our feelings" (MS2 interview, Sep. 6, 2019). As noted, the mental health services offered by the COM were repeatedly mentioned by the study participants. One of these MS2s stated,

> One of the reasons I wanted to come here was because there seem to be such a robust bonus system and like a lot of really great free resources. And I do feel like the school has that. Honestly the [counseling center name] is my favorite resource that I use and has really changed how I felt about myself and realizing the academic shame I feel is because of how I think about myself. It's not like the school is making me feel this way. It's my mindset of how I think. (MS2 Interview 2, Aug. 8, 2019)

Lastly, a different study participant commented on the accessibility of faculty and staff. This MS2 shared the following:

> I like how available the faculty and staff are in terms of just being present on campus. I think that really helps in terms of just having access to people, and I think in a certain way, that makes the resources at the school more accessible just by making our deans and associate deans, rather than like figurehead, leadership figure figures, they make them feel like real people that people can trust and come to for resources and help, whether on an academic or personal level. (MS2 Interview 2, Aug. 6, 2019)

In this example, the accessibility and relatability of faculty and staff added to connection. Although the robust support systems at the COM were recognized by these MS2s, several areas that contributed to feelings of academic shame were also identified. Broadly speaking, one of these MS2s suggested the following:

> If you really take a step back and you weigh out all these facts, you look at it and then you have an understanding of it, then you'll know how to fix it. If you know that that's what's happening, it's like the self-rejection, then we're going to focus on more self-acceptance. We're going to find ways to validate more students. We're going to find ways to really care about the things that you're suppressing instead of letting it go into that compartment. (MS2 Interview 1, Sep. 9, 2019)

This quote suggested the potential value for the COM to assess its current culture and practices through the lens of shame. For example, as noted earlier in the findings, several of the MS2s discussed how interactions with faculty members elicited feelings of academic shame. More specifically, this academic shame agent was tied to a perceived imbalance in the type of feedback offered to MSs. In his feedback, this MS2s expressed a lack of empathy demonstrated by some faculty members. Similarly, a different study participant summarized this feeling:

> I feel like everyone just thinks if I went through it, you should go through it too. I think that, that needs to change that aspect of it. I think it slowly is. People are realizing that the mental health aspect of the whole thing is very important, and that having a bunch of miserable doctors is not a good goal. That whole idea, if I was miserable in med school, you should be too, is not the way to go forward. Or if I was miserable in residency you should be too. Or if I was miserable taking Step 1, you should be miserable taking Step 1 too. I mean, there's a lot of smart people in medicine and I think they can think of smarter ways of evaluating people, and maybe not put so much emphasis on one test and have so many cutoffs. (MS2 Interview 2, Aug. 13, 2019)

Although a few of these MS2s expressed concerns about faculty members or a course on formal evaluations, they also felt their feedback did not result in changes. For example, a study participant shared the following:

> I guess if they're getting feedback, maybe being more responsive, I guess a faster response to it. I know there've been blocks where I think students have been very frustrated and given feedback about it midway through, but it didn't change anything. If at all if it feels like it's set in stone. (MS2 Interview 1, Aug. 8, 2019)

This same MS2 added that feedback "might go into the void, they might care a lot about it, but even if they do care a lot about it, I probably wouldn't see the effects of it" (MS2 Interview 1, Aug. 8, 2019). Again, this statement reflects a perceived barrier for a MSs' ability to influence the culture or current practices at the COM for the better via feedback. Finally, a few study participants discussed a recent policy related to grading. For example, one MS2 commented,

> Maybe one thing the school can think about changing is the new grading policy, in some ways, for block exams, where if you fall below a 70. I think, in a block exam, you have to write questions and you have to go in for a special meeting with the block director to, in our eyes, remediate some material. Conceptually, it's a great idea. You have one-on-one targeted learning with the student, and to intervene before they fail that block. It makes sense on an intellectual level, but I don't think it jives well with students who are already very time and academically burdened to spend another X number of hours trying to address that. I don't know if there's a better way, but when that policy was implemented last year, our class definitely responded to it very negatively. (MS2 Interview 1, Aug. 6, 2019)

Another study participant commented about the policy and stated, "I guess it just feels really punitive. I guess you know the grade itself is telling you, "I'm not where I am supposed to be for this course. But then to add a punitive element for that feels like it's trying to shame people" (MS2 Interview 1, Sep. 9, 2019). In summary, this collection of examples captured the study participants' reflection on the different elements of the culture and practices at the COM. This section captured current practices that minimized feelings of academic shame, as well as those that unintentionally elicited the feeling.

In addition to this need for further investigations at the COM, these MS2s also provided feedback on the delivery of ASRT. For example, one study participant shared,

“I was surprised how openly everyone talked about their academic shame at the workshops, for sure. Definitely helped. It made me really happy to see that” (MS2 Interview 1, Aug. 6, 2019). Another study participant commented about the ASRT:

> I think they were really helpful. I think the biggest hurdle for a lot of us is actually identifying what those feelings are because I think we all have them, and for me at least, it's really difficult for me to combat something if I don't know what it is. So, the same way with identifying my avoidance anxiety thing, having a name for it and understanding what it is and how big it is and how to deal with it, I think is a really big step in handling it. (MS2 Interview 1, Aug. 13, 2019)

This quote reflects the value of cultivating awareness and knowledge around shame and its influence over academics. Moreover, another MS2 asserted,

> I realized is that, that's a need and that we need to have more workshops, or we need to have some kind of safe space to do that. People that understand shame to be around other people that go through shame. (MS2 Interview 1, Sep. 9, 2019)

A different study participant commented on the size and the structure of the ASRT:

> I think that having it be a large thing would be not that beneficial because people are not as willing to like talk about things that they're shameful with in front of like 80 people. But having smaller groups of like six people of classmates kind of talking about it I think will be a good way for our students to realize that like, "Oh all these other people are going through the same things that I am.” (MS2 Interview 2, Aug. 6, 2019)

Even though this example reflected the benefit of small group interactions and the safety it promoted within the ASRT, other study participants spoke about the active learning in the workshops. For example, one MS2s noted,

> I think it was also very enlightening for me to hear everyone, especially when we did the board breaking exercise and we all shared what we had written on the board, because that was specifically an academic shame hot-spot. I thought it was so interesting to hear what other people said, because I wouldn't have known that about a lot of people, and I think it was helpful to see that many of us had very similar academic shame triggers or just feelings of shame around academics. It made me feel more connected and less alone in those feelings. (MS2 Interview 1, Aug. 7, 2019)

This example reflected the benefit of the hands-on activities in the workshop, as well as the actual application of Brown's SRP. Along those lines, a study participant shared,

> I thought it was a really great series. I like how you really show that you respected our time by never going over time, that I felt very valued when you did that, so I really appreciated that. I loved that you intertwined a lot of activities, but you created a safe space where we could share when we wanted or not share, when we didn't. I loved the activity with the board. It was really empowering to have to kind of make myself feel vulnerable about walking up in front of all my colleagues and being like, please break this board body, please break the board. (MS2 Interview 1, Sep. 6, 2019)

Again, this example showed the value of the active learning in the workshops and opportunity to apply the practices of shame resiliency within an educational context. Simply put, one study participants stated, "I really liked the workshops. They were very interactive, and it wasn't just informational lecture" (MS2 Interview 1, Jul. 13, 2019). Finally, several of these MS2s noted how participation in the ASRT had influenced them outside the scope of academics. For example, a study participant noted,

> I think also with the workshop I just been able to recognize shame in my personal life more so than academic shame. That was kind of an awakening, definitely in my experience. So just, you know because of the workshop that I'm trying to understand how it has affected my life personally and just see what resources I can use to make sure that I'm dealing with shame appropriately in a more healthy way. (MS2 Interview 1, Jul. 13, 2019).

This instance suggested participation in the ASRT encouraged further reflection and personal growth for this MS2. On another note, a different study participant noted how participation in the workshops "have been a really great reminder in general that I can use this on my practice for other people too. That yes, I feel shame, but so does everyone else at times" (MS2 Interview 1, Sep. 6, 2019). Finally, a different MS2 summarized the benefit of learning about shame as it relates to the field of medicine, when he said:

> I think there are so many negative things that we hear about that happen to doctors and medical students that could—I don't want to say be prevented, but we

> could help a lot of people if people are actually able to talk about this kind of stuff. I think it would be beneficial for, not only our patients to have physicians who are capable and willing to have those conversations, but for the physicians themselves to be able to have that level of self-realization and be able to open up about it would be helpful. (MS2 Interview 1, Aug. 13, 2019)

This statement exemplified the connection between self, feelings of shame, and their work as a future physician. These cases reflected the value of learning about shame beyond the focus on academics in medical school. Although study participants spoke highly of their learning experiences in the ARST, they also offered feedback for enhancing the innovation. The following section highlights several of these suggestions.

In terms of enhancing the ASRT, one study participant suggested extending the length on the innovation. This MS2 stated, “I thought they were short, to be honest. I think they could've even been a little bit longer. Yeah, just maybe like an hour and a half to two hours” (MS2 Interview 1, Aug. 12, 2019). Other study participants suggested that workshops or panels be integrated within the curriculum over time. For example, one MS2 shared, “I think that might be useful just to let the first years know that it's okay to struggle and it's okay to feel like you're not enough sometimes. Even the people you look up to or you think know it all also struggle continuously” (MS2 Interview 1, Aug. 1, 2019). Along those lines, this study participant added the following:

> Something I would really enjoy is, as I mentioned, kind of having like a panel of people talking about shame and even third and fourth years. People that we all look up to, particularly in first year of realizing that we all struggle, and no one has this down perfect. I think that would help break the stigma that as you go through you just kind of hit this stride and everything's easy. I don't think that's—that's certainly not the case for me. I don't think that's the case for many people. I think that would help a lot of the anxiety that I would have first year personally. Maybe some the anxiety I have now in the second year. (MS2 Interview 1, Aug. 1, 2019)

This quote suggested the value of integrating aspects of the ASRT across multiple years of medical school. A different study participant stated,

> I don't know what's the best way to do it, but I think making it an acceptable conversation topic to begin with; that's helpful, for sure, because— Putting those words, that name to those emotions in the first place is super helpful, because maybe people don't even know that's what they're experiencing. Right? They could just think, like, "Oh. I'm just stressed. I'm just having a really tough time at school. It's just a period, lots of things overlapping, and I'll get over it," right, "I've always gotten over the things in the past. (MS2 Interview 1, Aug. 6, 2019)

In summary, these examples depicted several of the recommendations study participants provided for improving the ASRT. Moreover, these MS2s offered their thoughts on how additional conversations about academic shame may be integrated at the COM.

Chapter 4 reported the findings of the of Cycle 3 of this AR study. More specifically, the outcomes of the quantitative analysis were fully described. In addition, the themes and assertations that emerged from the qualitative data analysis were also illustrated. Evidence from the qualitative data sources were provided to support these interpretations. The following chapter provides a discussion of these findings.

CHAPTER 5

DISCUSSION

Stay curious, keep learning and keep growing.
And always strive to be more interested than interesting.
~ Jane Fonda

To reiterate, the goals of this AR study's educational innovation were to help MS2s normalize feelings of academic shame and to respond to these feelings in more adaptive ways. Therefore, the ASRT focused on cultivating awareness and understanding of shame and introducing new skills focused on adaptive responses to the feeling. To fully understand the influence of this change in practice at the COM, a concurrent mixed-methods study was conducted to answer the two RQs for Cycle 3 of this investigation.

Chapter 5 begins with a brief summary of the findings of Cycle 3. Next, it further examines the findings and illustrates complementarity in the data sources and analysis. In addition, Chapter 5 compares the findings of Cycle 3 to the reviewed literature and several of the studies originally discussed in Chapter 2. Moreover, this chapter considers the implementation of the ASRT and the findings through Hall and Hord's framework of innovation acceptance and use which was summarized in Chapter 3. Lastly, Chapter 5 articulates possibilities for additional cycles of this AR study. To begin, the two guiding RQs of this cycle of research are listed, which follow.

Research Questions

- RQ1: To what extent does participation in an ASRT influence MS2s' (a) understanding of shame, (b) perception of their self-efficacy practices in regard to shame resiliency, and (c) intention of engaging in help-seeking behaviors?

- RQ2: How do MS2s respond to feelings of academic shame during their medical education before and after participation in an ASRT (d)?

The following section provides a brief summary of answers to these questions.

Summary of the Findings

Research Question 1

Chapter 4 fully described the findings of the Cycle 3; the following provides a brief summary of these outcomes. In terms of RQ1, the quantitative question, a repeated measure ANOVA, measures effect size and descriptive statistics were used to analyze the data from the pre- and post-innovation survey instrument. More specifically, the construct of adaptive responses to feelings of academic shame were examined in three sub-components: knowledge of shame, self-efficacy in shame resiliency practices, and intention of help-seeking behaviors. The multivariate and univariate analyses of the data yielded a statistically significant difference in pre- and post-scores for each of the three sub-components. Moreover, the analysis suggested a large effect size for a within-subjects design as measured by Cohen's criteria (Olejnik & Algina, 2000).

Research Question 2

In terms of RQ2, the qualitative question, the data from the interviews and student journals were analyzed by a constant comparative approach. This process supported a "grounded interpretive approach" in which the interpretations were established based on the data (R. Buss, personal communication, Mar. nn, 2018). During the analysis, six themes emerged from these data sources, as well as, six corresponding assertions. First, the study participants learned about the anatomy of shame. In other words, the ASRT enhanced their knowledge of and understanding of feelings of shame, as well as, how

these feelings influence academics. Second, the data revealed the physiology or function of academic shame triggers, as study participants learned about feelings of academic shame. In short, feelings of academic shame are regularly invoked by specific academic shame agents or different measuring sticks. Third, the ASRT also turned a spotlight on feelings of academic shame and modeled the benefit of practicing vulnerability. This outcome was accomplished by creating opportunities to normalize the feelings by providing a safe place to talk about the feeling and practice vulnerability with others. Fourth, the data also revealed that the ASRT promoted changes in perceptions of their self-efficacy of shame resiliency practices and fostered awareness of inherent challenges in the application of these practices. Fifth, two counteragents to feelings of academic shame became apparent in the data. The identified counteragents were connection and help-seeking. Sixth, the data suggested there were opportunities for macro- and micro-level changes in practices at the COM to minimize feelings of academic shame and foster additional shame resiliency in MSs at the COM. As noted, the data sources were analyzed separately. The following section discusses the complementarity in the findings.

Complementarity of Data

This section examines the study participants' understanding of shame, perceptions of self-efficacy in SRP, and intention of help-seeking behaviors, as well as the relationships within the data.

Although several data sources were used to answer each RQ respectively, an examination of the combined findings follows, which articulates the complementarity of the data. In other words, this section describes the degree to which these data sources suggested congruences (Green, 2007). As the quantitative data analysis revealed, the

ASRT influenced the study participants' understanding of shame, perception of their self-efficacy practices in regard to shame resiliency, and intention of engaging in help-seeking behaviors. As noted, there were statistically significant differences in the pre- and post-innovation survey data that measured the sub-components *of adaptive responses to academic shame.* Parallel to these findings were several of the themes that become apparent from the qualitative data, which was summarized in Chapter 4, Table 6.

Understanding Shame

In terms of their understanding of shame, the first three themes supported the quantitative finding of this sub-component. These themes bolstered the assertion that these MS2s learned about the anatomy of shame, which was reflected by a deeper understanding of shame and academic shame. In addition, data suggested that study participants can more accurately distinguish feelings of guilt and embarrassment from feelings of shame. Moreover, these MS2s learned about the function or physiology of academic shame triggers. The different academic triggers discussed by the study participants were categorized in two ways. One of these ways reflected specific shame eliciting agents, such as an experience or interactions an MS2 had that were more subjective in nature eliciting feelings of academic shame. The other way is characterized by different types of measuring sticks that are used as a type of metric real or imagined to evaluate oneself as a MS. Some of these measuring sticks took the form of actual numbers, such as exam scores, performance on Step 1, or percentages obtained in question banks. Other measuring sticks took the form of comparison to classmates, or fallings short of their own expectations of what a "good medical student" would be doing or not doing. Finally, while enhancing their knowledge and understanding of shame, the

ASRT provided an opportunity to turn a spotlight on feelings of academic shame. In other words, this learning experience exposed the fact that everyone experiences this feeling. In addition, to normalizing feelings of shame, these MS2s also practiced vulnerability by talking about their own feelings of academic shame with each other. This outcome of the ASRT further supported the study participants' learning through the sharing of their lived experiences.

Perception of Self-efficacy in SRP

In terms of changes in perception of their self-efficacy in regard to shame resiliency, the fourth theme supported the quantitative finding of this sub-component. This theme revealed perceived changes in the self-efficacy of these shame resiliency practices. Specifically, the study participants described how they are applying the Brown's SRP after their participation in the ASRT and compared these changes to how they responded previously to feelings of academic shame. In addition, these MS2s described a range of adaptive responses to the academic shame, such as labeling the feeling, getting curious about the feeling, and then actively choosing a response. Other study participants noted changes in their willingness to use resources and several MS2s engaged in new help-seeking behaviors. As such, the demonstrated ability to implement these practices and engage in more adaptive responses suggests changes in their self-efficacy as it relates to these practices. Lastly, the study participants note challenges to implementing these practices consistently. For instance, several of these MS2s share they do not always get it right, or struggle when responding to the feeling. However, the data also reveal MS2s feel more confident in their ability to do so.

Intention to Engage in Help-Seeking Behaviors

In terms of changes in intention to engage in help-seeking behaviors, the fifth theme supported the quantitative finding of this sub-component. This theme revealed two counteragents to feelings of academic shame, which were connection and help-seeking. The qualitative data capture changes in how these MS2s thought about reaching out to others or seeking helping, as well as actual behavioral changes. For instance, several MS2s describe how they are talking more openly about feelings of academic shame with friends or classmates, as well as seeing their learning specialist or by beginning to use the counseling services offered at the COM. As such, these findings also support the quantitative data for this sub-component.

In conclusion, both types of data show complementarity. Even though the sixth theme that surfaced from the qualitative data did not align directly with the examined sub-components of RQ1, it did underscore several practices at the COM that are perceived as beneficial to minimizing feelings of academic shame or potentially eliciting this feeling in MSs.

Relationship to Literature and Existing Research

Chapter 2 introduced Brown's (2006) SRT which was chosen as the theoretical framework for this educational innovation. This decision was informed by the earlier cycles of research. The three-part workshop series of the ASRT, provides the opportunity to learn about shame, academic shame, and shame resiliency practices.

Shame Resilience Theory

There is consistency between this AR study's findings and SRT. To be more precise, the data suggest these MS2s learned how to recognize shame triggers related to

academics after their participation in the educational innovation. In addition, the ASRT also promotes greater awareness of the presence of academic shame and a readiness to grapple with the feeling. Whereas the quantitative data, indicated a change in the study participants' perceptions of their self-efficacy of SRP, the qualitative data capture how these MS2s are labeling feelings of academic shame and connecting with others during and after the ASRT. Put differently, the findings of Cycle 3 suggest alignment with elements associated with shame resiliency as depicted by Brown's (2006) SRT.

Perhaps more importantly, the variety of the learning activities embedded in the ASRT allow MS2s to apply this new learning over the course of the workshops. In other words, each workshop provides structured learning activities that guide the participants through these practices. For example, during workshop 3, MS2s visually portray one of their academic shame triggers on a wood board and then label it as such. Next, the study participants have the opportunity to literally "speak shame" aloud and share their experience/s with others. Thus, this group sharing is a practice in vulnerability as defined by this AR study. As the qualitative data revealed, this shared group experience fosters empathy and connection among the study participants promoting a sense of community. Finally, the activity ends with these MS2s breaking the wood boards with their hand or foot. This culminating activity for the ASRT was of particular relevance because it underscores the power of self-talk. Moreover, it is intended to leave these MS2s feeling empowered, not powerless over feelings of academic shame. Several of the study participants stated that this activity was very powerful for reinforcing their learning.

Additionally, the outcomes are consistent with the emphasis placed on perfectionism (Enns et al., 2001) and the imposter syndrome (Cowman & Ferrari, 2002;

Villwock et al., 2016). Again, relations between the outcomes of this AR study and these phenomena can be seen.

Perfectionism

Recall Brown (2012) says perfectionism is simply a manifestation of feelings of feelings of shame. Specifically, she asserts “perfectionism is self-destructive and addictive belief system that fuels this primary thought: If I look perfect and do everything perfectly, I can avoid or minimize the painful feelings of shame, judgment, and blame” (Brown, 2012, p. 130). Theme 6 that emerged from the qualitative data, portrays the presence of high expectations and perfecting behaviors. In addition, theme 2 suggests a range of academic shame triggers are experienced by the study participants. For example, various types of “measuring sticks” emerged from the data, such as FOMO as it relates to studying or falling short of one’s own expectation. These notions reflect an assessment of what a “good medical student” should be doing or how they should be performing. The presence of these themes suggest MS2s have experiences that regularly invoke feelings of academic shame. More importantly, it illustrates the importance of learning about shame and developing resiliency to the feeling in MSs at the COM.

The Imposter Syndrome

The findings of Cycle 3 demonstrate a connection between feelings of academic shame and the imposter syndrome as well. As indicated previously, Villwock and colleagues’ (2016) study suggested that the imposter syndrome is “characterized by chronic feelings of self-doubt and fear of being discovered as an intellectual fraud” (p. 364). Note that this definition is closely related to the feeling of academic shame as defined in this AR study, which reflects the belief that one is a bad MS, or one is flawed

as an MS. The outcomes of Cycle 3 reveal MS2s often have experiences that elicit the feeling of not good enough as an MS. The data also suggest that these study participants experience a distorted perception of others at times. This perception reflects a belief that other MSs have it all together and never feel that way. In short, this powerful feeling and faulty belief invoked by shame and coupled with a learning environment in which one cannot actively talk about this feeling may amplify the presence of the imposter syndrome. This connection underscores the importance of learning about academic shame and developing resiliency to the feeling in MSs at the COM.

Related Research

Connections can also be drawn to several recent studies previously discussed. Recall the work of Bynum et al (2019b), in which they discussed how MRs experienced feelings of shame. Their study suggests MRs had a range of responses to feelings of shame, both maladaptive and adaptive in nature, as a reaction to different shame triggers (Bynum et al, 2019b). These findings parallel the findings of this AR study which suggest various experiences may elicit feelings of shame in MSs. Similarly, the study conducted by Bynum et al. (2019a) reviewed the outcomes of a seminar on shame offered to MS2s. These MS2s reported improvement in their ability to recognize this feeling, as well as other beneficial outcomes, such as increases in readiness with regard to connecting with others when experiencing feelings of shame (Bynum et al, 2019a). Again, these outcomes are similar to the findings of this AR study. As noted in Chapter 2, these studies underlined the timeliness and bearing of this AR project in medical education. Finally, the findings of this AR study demonstrate the value and viability of educational innovations focused on shame and resiliency to shame medical schools.

Innovation Acceptance and Use

The introduction of the ASRT at the COM represents a change in practice. As such, a theoretical model on change is helpful in understanding the introduction of the ASRT. Specifically, in Chapter 3, Hall and Hord's theory on acceptance and use of an innovation was introduced. Their levels of use range from individuals who have little or no awareness to those that are able to apply their learning to new experiences (Hall & Hord, 2011). The findings of this cycle suggested that the study participants shifted from Level 0 or I to Level IV. Although the quantitative data captured the more immediate influence of the ASRT, the qualitative data revealed these MS2s applied their learning to new experiences. For example, in the case of intention of help-seeking, the focus of RQ1 was to capture a change in their perception. Nevertheless, the qualitative data suggested that engagement in the ASRT changed their perceptions *and* fostered new adaptive responses to feelings of academic shame, such as reaching out to others or utilizing the COM's counseling services. This change, for example, highlighted the new learning these MS2s experienced that is consistent with Hall and Hord's model. It is important to note that the data also suggest study participants struggle with applying this practice at times after their participation in the ASRT. Thus, simply knowing these practices does not make it easy or eliminate the challenges in applying the practices, because shame is a powerful emotion. With respect to innovation acceptance and use, shame resiliency requires initial awareness, followed by understanding, then ongoing application by a user. It is through the ongoing application that users continue to learn more about their own feelings of shame, triggers, and further develop their adaptive practices. In other words, MSs do indeed need to *practice* these practices.

An Alternative Pathway

Introduction of the ASRT at the COM is a change in practice. As noted, this change in the “way we do things around here” was informed by the earlier cycles of this investigation, as well as, the literature and research on shame. For example, shame may elicit a response to “deny, hide, or escape the shame-inducing situation” (Tangney et al., 2007, p. 6). Environmental strains may exacerbate this reflexive response. To complicate matters, reluctance to grapple with feelings of academic shame may reinforce these same cultural and professional expectations. The bar is set high and MSs often feel the need to do everything perfectly. These norms may inform a larger narrative about what medical school looks and feels like at the COM. However, even high achieving MSs will fall short of this standard, because no one does everything perfectly all of the time. In contrast, findings of this AR study suggest the introduction of the ASRT creates the space for a counter narrative at the COM. This counter narrative challenges these norms by turning a spotlight on shame. Put differently, instead of ignoring or covering up feelings of academic shame, MSs learn about this feeling and talk openly about it. This new narrative encourages students to question, not suppress or compartmentalize feelings of shame. Finally, the counter narrative fosters an alternative pathway for responding to feelings of academic shame more adaptively.

Future Consideration

Integration

Cycles 1 and 3 are the first steps in integrating educational learning experiences on shame at the COM. The breadth and depth of this integration was purposefully limited to fit within the required dissertation framework. The findings of this AR study will be

shared with key stakeholders at the COM. In terms of future uses of the innovation, one way of approaching its integration would be to incorporate components of the workshops at key points in the program. Considerations and questions would need to be carefully addressed, such as “What and when would be an appropriate introduction to shame for MS1s?” or “What and when would re-exposure to shame and shame resiliency be for MS2s?” and “What would these different learning experiences look and feel like?” This approach would allow for a more seamless integration within the current curriculum offered at the COM and expose all MSs to learning about shame over time. However, adequate time and space would need to be allotted within the existing program. Another possible approach for the integration of the ASRT would be to offer it as an elective opportunity during an independent course that takes place prior to year two at the COM. This option would not compete with existing curricular needs, but provide MSs a choice in engagement and offer course credit for the learning experience. Even though this approach would be timely as Cycle 3 illustrates, the innovation would be far less comprehensive in scope, reaching fewer students. Of course, hybrids of these two options would be worth considering. Regardless, data collected over the course of this investigation can inform next steps and other potential changes in practices related to minimizing feelings of academic shame or fostering resiliency to shame at the COM.

Research

Cycle 3 provides further clarity on this action researcher’s problem of practice. Nevertheless, this topic warrants further investigation at the COM, as well as within medical education and the field of medicine as a whole. Again, the scope of this AR study was limited to fit within the required dissertation framework. Therefore, future

cycles of research could be employed to dive deeper into understanding feelings of academic shame in MSs. For example, future cycles could explore MSs' experiences across all four years of the training. Further, research studies could be expanded to examine at feelings of shame beyond academic experiences. For example, how does shame surface in the personal or professional (clinical, leadership, etc.) areas of MSs' lives. Similarly, although this study focused on MSs, additional research might focus on faculty and staff at the COM. Learning and teaching are two sides of the same coin, so examining feelings of shame from multiple perspectives within the context of medical education would be of benefit. Moreover, teaching like learning, is a vulnerable experience and thus a possible source of feelings of shame for faculty and staff.

As noted, Chapter 5 reviewed the findings and explained complementarity in the data sources and analysis. In addition, the chapter linked the findings of Cycle 3 to existing literature, theory, and several studies captured in Chapter 2. Finally, this chapter articulated possibilities for additional cycles of research. Chapter 6, the final chapter of this dissertation, depicts lessons learned along the way, a reflection on practicing the practices of shame resiliency as a doctoral student, as well as a few closing thoughts.

CHAPTER 6

REFLECTION

Chapter 5 provided a discussion on the findings, examined the complementarity of the data, and described the outcomes of Cycle 3 in relationship to the literature and research from Chapter 2. This chapter also discussed implications for the integration of the ASRT at the COM, as well as, suggestions for future cycles of research. In Chapter 6, I depict several of the lessons learned over the course of this research endeavor. I also include a brief reflection of how I applied the practices of SRP during this time, as well as a few concluding thoughts.

Lessons Learned

Over the past three years, my learning has been continuous. However, in this section I describe several specific lessons. First, as one might anticipate, researching academic shame, something most individuals would not want to talk about, has its own inherent challenges. However, I am pleasantly surprised by the willingness and courage demonstrated by our MSs to engage in these efforts to learn more about feelings of academic shame at the COM. MSs repeatedly share how valuable they perceive this matter to be in medical education and the field of medicine. I firmly believe that when busy MSs tell you something is worth their time; you know you are on to something important. In addition, several faculty and staff members rallied behind me, affirming the need for this type of work in medical education. The continual affirmation of this research has deepened my desire to learn more about shame and to understand what we can do differently here at the COM. Three years later, I feel just as passionate as I did when I began exploring this problem of practice.

Second, while these cycles of research are focused on academic shame and shame resiliency in MS2s, my ongoing exploration of shame fostered exchanges with MSs across all four years of the curriculum at the COM. These informal conversations reveal further experiences that elicit feelings of shame. Often these shame triggers appear in unanticipated places, such as around research or involvement in extra-curriculars activities. Nevertheless, MSs also provide examples of feeling shame or guilt around being a son or daughter, parent, partner, or friend. These dialogues reinforce the need for continual exploration of shame and feelings of guilt at the COM. Simply stated, the more I have learned, the more questions I have about these types of feelings.

Finally, learning about academic shame deepened my understanding of its connection to phenomena such as stigma, imposter syndrome, and decision-making processes. Even though I have so much more to learn and to better understand, this AR project cultivated a deepened respect and understanding for this emotion. Along those lines, as a learning specialist, I have the unique opportunity to journey alongside MSs at the COM. I am a partner in learning. Without a doubt, this relationship necessitates practices such as being present, active listening, suspending judgment, and perhaps most important, empathy. Although I may not always get it right, these practices are something I strive for in every encounter. However, supporting MSs on their journeys of becoming a future physician takes a community that shapes the cultural and professional expectations of any medical school. This AR study reinforces the notion that these practices are not unique to the work of learning specialists, but are essential for the entire community to model and support.

Practicing Shame Resiliency

Over the past three years, it was impossible to learn about shame and practices of shame resiliency and not grapple with these notions on my own educational journey. Although my doctoral program was a very a different experience compared to the context of this AR study, any learning experience has the potential to elicit feelings of shame. In my case, my growth as an action researcher, scholar, and leader was deeply tied to my sense of self. Simply put, this learning experience was very important to me, just like becoming a medical doctor is very important to our MSs. Throughout the course of my doctoral studies, I became highly aware of my academic shame triggers, which would invoke the feeling of not being good enough as a doctoral student. I also experienced firsthand the benefit of practicing resiliency to feelings of shame. Because my doctoral cohort was very familiar with my research focus through numerous course discussions and presentations, shame became a feeling we would talk openly about in our class discourse. For example, every so often, I would share an experience in which I experienced feelings of shame and a classmate would respond with “Oh, me too” and then they would share something they felt or were experiencing. In that moment, the feeling of shame lost its hold on me. Through ongoing reflection, I became aware of the influence of shame on myself and others. Although I was becoming increasingly knowledgeable on shame and shame resiliency, it absolutely did not mean I did not struggle with this feeling. My own experience matched those of the Cycle 3 study participants. Although my first response to the feeling was very visceral, I discovered that I did not “get stuck” in that emotion and the distorted valuation of self. Sometimes I only needed a few minutes; other times, it took several days to move through the feeling and

on to practicing shame resiliency. At the end of the day, I learned to be a little gentler on myself and the time I needed to practice resiliency to this feeling.

As noted in my acknowledgement, Dr. Brené Brown provided a roadmap for this educational endeavor and she also served as my guide and inspiration. Brown's collection of work (research, books, talks, etc.) underscored the critical importance of modeling vulnerability to others as a way of being and leading. In other words, it is not just what Dr. Brown says that is of such significance, it is also how she says it. As such, I promised myself I would never ask a study participant to do something I was not willing to do myself. For example, during the delivery of the ASRT, I modeled the vulnerability I hoped to see in the study participants. Thus, I engaged in the SRP alongside these MS2s. In doing so, I shared my own experiences about feelings of academic shame, as well as how I responded to them. Upon reflection, I believe the alignment in what I said and did fostered the type of learning experiences I desired. I have no doubt I would have lost some level of credibility with these MS2s if I had been unwilling to share in these experiences along with them. I believe that helping others learn about feelings of shame is only strengthened when the facilitator is willing to authentically show the way. This way of guiding learning experiences make me and others feel vulnerable but has the potential to be equally transformational.

Final Thoughts

This AR study represents a sustained exploration of a problem of practice identified at the COM. Likewise, this endeavor represents a subject matter which I am deeply passionate. Not only has my growing understanding of shame fostered a deeper understanding of its influence and its relationship to medical education, it has also

facilitated my growth as a learner and developing person. As the title of this AR study suggests, there is a need to turn the spotlight on shame in educational settings such as medical schools. Becoming a physician is an incredibly challenging journey. Nevertheless, changes in practice integrated into medical school can support future physicians to embrace adaptive responses to feelings of shame and encourage help-seeking. The outcomes of these changes are likely to result in healthier and more resilient physicians, which is a goal every medical school should strive for the years to come.

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APPENDIX A

IRB APPROVAL

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Ying-Chih Chen
Division of Teacher Preparation - Tempe
-
Ying-Chih.Chen@asu.edu

Dear Ying-Chih Chen:

On 4/15/2019 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Turning the Spotlight on Shame: Fostering Adaptive Responses to Feelings of Academic Shame in Second Year Medical Students
Investigator:	Ying-Chih Chen
IRB ID:	STUDY00010018
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Post- Journal Prompts, , Dude Coudret 4.3.19.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Post Semi-Structured Interviews, , Dude Coudret 4.3.19.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Recruitment letter and Consent form, , Dude Coudret 4.3.19.pdf, Category: Consent Form; • Form-Social-Behavioral-Protocol, Dude Coudret 4.3.19.docx, Category: IRB Protocol; • Supervisor's Approval Letter.pdf, Category: Other (to reflect anything not captured above); • Pre- and Post-Survey, Dude Coudret 4.3.19.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 4/15/2019.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Dude Coudret
Ying-Chih Chen
Dude Coudret

APPENDIX B

POST-SEMI STRUCTURED INTERVIEW QUESTIONS

1. What are some of the challenges MS2s encounter during year 2? How so?
2. How do you see other MS2s respond to these challenges?
3. Tell me about your academic experiences since your participation the ASRT?
    a. Have you experienced any highs/lows? –Interesting experiences?
    b. Other experiences you would like to share?
4. After participation in the ASRT, how would you define shame?
    a. How does this compare to your previous understanding of shame?
    b. How does this differ from other related emotions, such as guilt and embarrassment?
5. After participation in the ASRT, how would define and describe feelings of academic shame?
    a. How does this compare to your previous understanding of academic shame?
6. How has participation in these workshops influenced how you think about your responses to feelings of academic shame?
7. What were your take-aways from your participation in the ASRT?
8. Have you experienced feelings of shame related to your academics since the participating in the ASRT? If so, can you describe these experiences and how you responded to these feelings?
9. Since your participation in the ASRT, have you used different approaches to overcome these feelings and obstacles?
10. How has participation in these workshops influenced how you think about help-seeking?

11. Has participation in the ASRT influenced you and your medical school aspirations in any other ways?
12. Describe to what extent that you believe in your abilities can respond to feelings of academic shame adaptively after participation in the ASRT?
13. From your perspective, what challenges remain with respect to your ability to respond to shame in adaptive ways?
14. What do you think the school can do to help MSs minimize feeling of academic shame?
    a. Faculty
    b. Staff
    c. Students
15. What do you think the school can do to help MSs respond to feelings of shame more adaptively?
16. Is there anything else you would like share regarding?
    a. Feelings of shame related to academics
    b. Responses to feelings of shame
    c. The ASRT
    d. Anything else

I appreciate your participation in this interview.

APPENDIX C

POST-JOURNAL PROMPTS

Directions: For the purpose of this study, shame is described as an uncomfortable and often “painful feeling or experience” that one is flawed (Brown, 2012, p. 69). The feeling also elicits internal assessment of self. In short, shame makes an individual feel as though there is something wrong with who they are or in this case something wrong with them as a medical student. Simply put, this feeling may make an individual feel as though they are simply “not good enough” (Brown, 2012, p. 61).

These journal entry focuses on academic related experiences that may have made you feel some level of shame. The level of or intensity of this feeling does not matter, only that you believe you felt it based on your experience/s. There are no right or wrong answers.

Complete this prompt if you experienced feelings of academic shame over the last month.

Pseudonym:

Date:

1. I experienced feelings of shame related to my academics when:
2. While I was experiencing these feelings of shame, I thought or felt:
3. I responded to these feelings or thoughts by:
4. Is there anything else you would like to share regarding feelings of academic shame or responses to this feeling?

APPENDIX D

PRE- AND POST-SURVEY

Part 1

Directions: This survey is divided into three parts. Part 1 will ask you to complete some basic demographic information. This data is being collected for the purpose of describing the sample of the participants in this study. In addition, you will also create a unique identifier. This identifier consists of using the first three letters of your mother's first name and the last four digits of your cell phone number. For example, "Sar 4567" would be the identifier for someone whose mother's first name is Sarah, and whose own phone number is (602) 543-4567. The accuracy of this data is important as your Post-Survey responses will be matched accordingly, along with your interview and journal entries.

Demographics

Gender: M / F / prefer not to answer

Age: _____

Your unique identifier: ______

Part 2

Directions: Part 2 will ask you respond to ten statements using the following scale to indicate your level of agreement with the statement.

Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
6	5	4	3	2	1

Knowledge about Shame (sub-component)

- I understand how shame can adversely affect my medical school performance.
- I know how shame differs from other emotions such as guilt, embarrassment, and humiliation.
- I understand the nature of self-talk as it relates to shame.
- I am aware of common shame triggers.
- I can recognize common maladaptive responses to shame.

Self-Efficacy in Shame Resiliency (sub-component)

- I can recognize my physiological responses to shame.
- I can recognize my shame triggers.
- I can distinguish feelings of shame from other emotional responses.
- I can recognize my self-talk when it becomes ‘shame talk.’
- I can distinguish my adaptive responses from my maladaptive responses to shame.

Part 3

Directions: Part 3 will ask you respond to eight questions using the following scale to indicate the likelihood of seeking help from the individuals listed.

Extremely Likely	Likely	Somewhat Likely	Somewhat Unlikely	Unlikely	Extremely Unlikely

Intention of Help-Seeking (sub-component)

Rate how likely you would be to seek help from the following individuals, if you were experiencing feelings of shame related to your academics.

- Learning specialist
- Tutor
- Career or professional advisor
- Clinical psychologist
- Associate dean
- Wellness mentor
- Block director
- Faculty instructor

Thank you for you completing this survey.

APPENDIX E

CODEBOOK

The following provides all of the codes in the study listed in alphabetical order.

1. Adjusting expectations
2. Called out
3. Class attendance
4. Class discussion
5. Comparison
6. Course feedback
7. Cultivating awareness and understanding
8. Culture of medicine
9. Demands of medicals school
10. Dismissal
11. Dissonance in Step 1 and course study
12. Distorted perspectives
13. Enhancing the college of medicine
14. Enhancing the innovation
15. Faculty
16. Falling short of expectations
17. Fear of missing out (FOMO)
18. Labeling of maladaptive responses
19. Measurement
20. Mentor
21. New understanding of academic shame
22. New understanding of shame
23. Normalizing shame
24. Openness to talk about different emotions
25. Others as support
26. Peer
27. Policy
28. Positive attributes of the college of medicine
29. Positive attributes of the innovation
30. Positive outlook
31. Post-help-seeking
32. Post-workshop change
33. Power of connection
34. Pre-help-seeking
35. Prior understanding of academic shame
36. Prior understanding of shame
37. Scholarly project
38. Shame and others
39. Specific adaptive responses
40. Specific challenges
41. Sunday test-taker
42. Supervisor feedback
43. Understanding of embarrassment

44. Understanding of guilt
45. Visibility of imperfections
46. Willingness to talk about feelings

The following provides definitions of the category of codes and actually codes. This list is arranged in alphabetical order by category.

Category and Definition	Codes and Definitions
Academic shame agents. This category captures specific academic shame agents.	Specific agents: Captures a variety of academic shame eliciting agents (n=12). Class attendance: attending or not attending class. Called out: asked a question on the spot in class. Class discussion: not knowing something in class. Course feedback: written or verbal feedback. Dismissal: academic standing. Faculty: language used by faculty. Mentor: feedback from a mentor in the community. Peer: classmates or friends. Policy: existing policy. Scholarly project: ongoing research project. Sunday test-taker: taking block on exam later. Supervisor: feedback from a supervisor.
Adaptive responses. This category captures a variety of codes that reflect how study participants actively choose to respond to feelings of shame differently.	Adjusting expectations: Suggests the practice of setting more realistic goals, adjusting them, and moving forward adaptively. Cultivating awareness and understanding: Reflects an understanding about one's own feelings as it relates to shame and academic shame triggers Specific adaptive responses: Captures specific cognitive or behavioral responses to feelings of shame.
Challenges needing to be negotiated. This category reflects the ongoing challenges that MSs encounter in their experience.	Demands of medical school: Illustrates a variety of challenges students encounter in medical education. Dissonance in Step 1 and course study: Suggests a struggle MS2s encounter, while study participants report the importance of course (block) study, they feel challenged by the weight/importance of Step 1.

Challenges to these practice. This category reflects the difficulties that persist in responding to feelings of shame adaptively.	Specific challenges: Captures a variety of challenges study participants shared regarding responding to feelings of shame adaptively.
Connection a counteragent. This category illustrates a new openness, seeing others as a support instead as a source of judgement, the value of connection and the practice of vulnerability.	Openness to talk about different emotions: Reflects a new willingness to be more open about different feelings, not just feelings of shame. Others as support: Suggests a new understanding of the need connect with others as a remedy for shame. Power of connection: Captures a new understanding how connecting with helps one recognize commonalities in experiences and feelings, a sense of relief with sharing and empathy, and feeling less alone.
Deepened understanding of shame/academic shame. This category reflects several codes that reflect changes in the study participants understanding of shame.	Prior understanding of academic shame: Reflects how study participants define or describe feelings of "academic shame" or shame related to their academics after their participation in the ASRT. Prior understanding of shame: Reflects how study participants define or describe feelings of shame prior to their participation in the ASRT. New understanding of academic shame: Reflects how study participants define or describe feelings of "academic shame" or shame related to their academics prior to their participation in the ASRT. New understanding of shame: Captures how study participants define or describe feelings of shame after their participation in the ASRT. Shame and others: Reflects a new awareness of how shame may be impacting others.

Differential diagnoses of shame, guilt, and embarrassment. This category reflects the study participants' ability to distinguish feelings of shame from feelings of embarrassment or guilt.	Understanding of embarrassment: Reflects how study participants define or describe feelings of embarrassment after participation in the ASRT. Understanding of guilt: Reflects how study participants define or describe feelings of guilt after participation in the ASRT.
Different measuring sticks. This category reflects different experiences that lead to distorted valuation of self.	Comparison: Reflects a variety of experience that elicit some form of comparison. Distorted perspectives: This code captures varies reflection on one's inaccurate perception of self and others. Falling short of expectations: Reflects a sense of not meeting one's expectation for themselves. Fear of missing out: Reflects the perception that everyone is always working and doing more learning or studying. Measurement: Reflects a variety of measurements associated with valuation of self, involving a number.
Enhancing our culture. This category reflects positive attributes of the COM or the innovation, as well as, suggestion on improving both.	Enhancing the college of medicine: Depicts suggestions for improving the COM as it relates to feelings of academic shame beyond the scope of innovation. Enhancing the innovation: Reflects student participants' suggestions for improving the innovation. Positive attributes of the college of medicine: Illustrates attributes at the COM that are beneficial for MSs as it relates to feelings of academic shame and shame resiliency. Positive attributes of the innovation: Captures the value of the innovation.

Exposing shame and practicing vulnerability. This category reflects the notion of acknowledging shame.	Normalizing shame: Reflects new awareness and understanding that everyone experiences feelings of shame. Visibility of imperfections: Reflects a willingness to show imperfections. Willingness to talk about feelings: Reflects new willingness to talk about shame and other feelings.
Help-seeking as a counteragent. This category reflects changes in student participant's perception about help seeking.	Pre-help-seeking: Captures reflects an unwillingness to seek help, okay for others – but not for self. Post-help-seeking: Reflects a new willingness to talk to friends, family, other study participants, and professional counselors.
High expectations and perfecting. This category reflects perceived challenges that are inherent with the culture of medicine and medical education.	Culture of medicine: Depicts a variety of elements of medicine and medical school as they relate to shame connected to notions of high-expectations and perfecting.
Practicing the practices. This category reflects changes in study participants after their participation in the ASRT.	Labeling of maladaptive responses: Reflects new ability to identify maladaptive response to feelings of academic shame. Post-workshop change: Consists of numerous behavioral changes study participants associated with as a result of participating in the ASRT Positive outlook: Reflects a renewed positive outlook and a sense in one's ability to overcome future challenges.

APPENDIX F

WORKSHOP ONE PLAN

Learning Outcomes

Students will be able to (SWBAT):

- Understand how shame is commonly defined within research literature.
- Identify differences in shame from other emotions.
- Describe the relationship between self-talk and shame.
- Identify common shame triggers that are identified within the research.
- Identify common maladaptive responses to shame identified within the research.

Session Plan

1. Introduction, welcome, and review Learning Outcomes.
2. Pass out and explain Guided Notes. This is personal note-taking and reflection tool for participants. Guided Notes are for participants' personal grappling and are confidential.
3. Review ground rules. Participants will have the opportunity to add to the initial expectations provided by the facilitator.
4. Participants will be asked to complete a page in their Guided Notes independently. These prompts will ask participants to define in their own words the key terms that will be reviewed in the workshop. The purpose of this step is to build upon existing knowledge of the participants.
5. Warm-up/hook activity. Participants will work in small groups on poster paper. The purpose of this activity is to visualize what shame looks and feels like. The facilitator

will facilitate a debriefing the activity. Participants will reflect and discuss the themes depicted on the posters.

6. Large group activity.
    a. Define shame. The facilitator will use a combination of tools (presentation, video clips) to share how shame is commonly defined in the research literature.
    b. Identify difference between shame and other similar emotions. The facilitator will use a combination of tools (presentation, video clips) and will provide concrete examples to demonstrate these differences.
    c. Identify and describe the relationship between self-talk and shame. The facilitator will review these concepts and will provide concrete examples. The facilitator will provide a demonstration of the nature of self-talk. Two participants will role-play a "voice" in one's head. Participant A will be asked a series of basic questions by the facilitator, while the other Participant B continues to talk behind Participant A demonstrating the distracting and powerful nature of self-talk.
7. Small group activity. Participants will be divided up into partners or small groups. Next participants will be asked brainstorm what they anticipate common shame triggers in three different categories (personal, professional, and academic). Brainstorming will be captured on small-dry erase boards. The facilitator will review the common shame triggers identified in the research and revisit group brainstorming. Participants will reflect and discuss themes depicted in each groups brainstorming.

8. Small group activity. Time permitting, groups will be asked to write down their ideas on common maladaptive responses to feeling of shame. The facilitator will review the common shame triggers identified in the research and revisit participant brainstorming. If needed, this activity can be situated in Workshop Two. An emphasis will be given to feelings of academic shame and common maladaptive response they believe medicals students have towards these feelings.
9. Wrap-up and provide a brief overview of Workshop Two.