IN THEIR OWN WORDS: EXAMINING MEDICAL STUDENT EMOTIONALITY IN THE CLINICAL YEARS OF MEDICAL SCHOOL

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ABSTRACT

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Current literature examining how students experience emotion in the clinical settings of the third year of medical school is lacking. To address the gap in scholarly literature, my study examined how medical students experience, respond to, and uncover meaning related to their emotions in the clinical settings of medical school. My investigation utilized a phenomenological methodology to identify thematic manifestations of my phenomenon of interest. I interviewed 12 medical students through purposeful sampling. My findings revealed three themes relating to emotions as a pop-up storm, emotions a state of becoming, and emotions as situated for students in third-year clinical settings of medical school. A conceptual framework based on my research findings is also examined. The thematic manifestations of the phenomenon of emotions in the clinical years of medical school are used to both establish how medical students experience emotion in clinical settings and contribute to existing literature on medical student emotionality in medical school.

This dissertation is dedicated to my family. Molly – thank you for being so supportive of me on this journey. Without your love and support none of this would have been possible. Benny, Tyler, Luke – thank you for your joyous spirits and wonderful personalities. You inspire me to be a better person everyday.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PROLOGUE

My newly minted hospital volunteer ID badge, still warm to the touch, hung perfectly from the pressed collar of my corporate issued polo shirt like a notary seal; signaling to all that I was now part of the team. However, as I was about to learn, joining a team in a clinical setting involves much more than a title and a job description. It requires indoctrination into the ethos of the place; the hierarchy, the language, the culture. An indoctrination I was thrust into the moment I stepped foot in a medical clinical setting for the first time.

On paper, my role within the clinic was straight forward. I had signed up to serve as a volunteer with the Child Life Specialist team, which consisted of a group of full-time and volunteer staff whose sole responsibility was to improve the experience and quality of life for the children during their stay at the children's hospital. This role, for me, often took the form of child-centered playful activity such as board games, toys, movies, crafts or other interactive modalities. As it turned out, however, my experience in the clinical setting was anything but playful. Specifically, I found myself experiencing a multitude of difficult emotions each week that caught me off guard and left me feeling depleted emotionally at the end of each shift.

One particular experience that rattled me was, on its surface, very routine. I was asked to go to a room to spend some time with a six-month-old baby whose parents were not present. Upon entering the room, I immediately felt an air of warmth and devotion; with pictures, signs, and cards adorning the walls and tabletop surfaces. The baby was awake, alert, and covered in a multitude of cords, tubes, and monitors. He smiled as soon as I leaned in, laughing alongside me as I made funny faces over the rail of his crib. Our game was briefly interrupted when a nurse came in to take vitals.

"Would you like to hold him?" she asked.

At the time, this was a tall order. I neither had kids, nor any experience with infants or small children, so the idea of holding a baby with medical needs was akin to asking me to balance of cup of water on my head. So, her question elicited an immediate rush of anxiety as I pictured what could go wrong.

"Uh, sure," I responded nervously.

She had me sit in a rocking chair near his crib, then placed him in my arms.

"Just make sure not to unplug any of his cords and you'll be all set" she uttered as she left the room.

I remember an immediate sense of intimacy that this experience drew out of me. Specifically, I felt a deep urge to provide care for this baby. To protect, nurture, and heal him. I sat there for a better part of a half hour, skin touching, arms starting to ache as I was nervous about moving him. When I finally set him back down in his crib, I felt a tremendous sense of guilt upon leaving the room. I felt as though I was abandoning him, and I couldn't shake the feeling. Further, I found this started to happen to me more and more as I began to interact with children that I often saw at their worst.

For me, this depth of emotion was not something I was used to, and I perceived that I lacked a certain toughness or clinical mindset that might have allowed me to separate from my emotions a little more. It was like picking up a person off the street and asking them to act in a play in which they had never read the script. I felt entirely out of my element, and I was drowning in the depth of emotions I was feeling during my shifts each week.

So my experience with my own emotion in the clinical setting was like a constant pulling on my heartstrings, only released upon leaving the patient room or hospital at the end of the evening. However, I think it was the slack, more so than the tension, on my heart that caused me

the most grief. In other words, that space in between rooms and in between shifts where I felt this emotional muddiness that I was not equipped to handle. When I had time to think about and process what I had experienced, I found that I lacked a framework in which to put these new and often painful experiences. In turn, I remember leaving each week feeling discouraged and fatigued from my brief three-hour shift. Additionally, I was confused as to why I would be feeling this way if I was willingly volunteering my time and looking forward to this experience beforehand.

I felt as if I could not shake these feelings either. I would come home with thoughts of the kids I had just spent time sticking to me, flooding my mind with images as I laid in bed at night. I'm not sure how, but I managed to make it six months in this experience before calling it quits. I recall feeling so disappointed in myself for what, in my eyes, I would consider a failure on my part. For I couldn't figure out why I wasn't able to better manage the challenging emotions I was experiencing and bring the best of me into each week, but I just could not. I left at the end of those six months beaten down emotionally and thoroughly resolved to never set foot in a clinical setting in any professional capacity again in my life.

CHAPTER ONE: INTRODUCTION

As I examine my lived account of working with patients in a clinical setting in this story above, I see many themes emerge. One of the most salient is how my experiences are laden with emotions. Further, there seems to be a deep sense of strife and confusion about these emotions, to the point where they were causing me distress and even dread to go back into the clinic for something as simple as a volunteer position.

Working full time in a medical school environment, concurrent with this clinical volunteer experience, and witnessing medical students expressing similar emotional difficulties in clinical settings left me with some critical questions that became the springboard for this current research. Namely, what is it like for medical students to experience emotions in clinical settings? How are medical students responding to or managing the emotionally laden experiences that accompany the clinical environment of medical school, particularly when they have no option to escape? Have they hardened themselves or developed some mindset or approach that separates them from the challenging emotions that accompany the clinical settings? If so, where and how is this learned and what might be the consequences of this approach to emotions?

As it turns out, the literature suggests that medical students are indeed experiencing powerful emotions in medical school, with many encountering similar difficulties to those that I had exhibited in the vignette above. In fact, there are numerous researchers within medical education who have determined that medical training can be emotionally intense and challenging, with emotional distress being common in medical students and residents (Doulougerili, Panagopoulou, & Montgomery, 2016; Helmich et al., 2014; Monrouxe & Rees, 2012; Rantanawongsa et al., 2005; Rhodes-Kropf et al., 2005; Shapiro, 2011).

In particular, symptoms of emotional distress escalate during the clinical years (Dunn et al. 2008; Mosley et al., 1994). Literature in medical education examining the transition from the first two years of medical school, traditionally involving more in-class didactics, to the third and fourth years of medical school which situates students in hospital wards for the clinical education portion of their education, has found common themes. Specifically, once students cross this threshold, they are immersed in an unstructured learning environment, have lack of time for recreation, long on-duty assignments, experience student abuse, and exposure to human suffering (Colford, 1989; Linn & Zeppa, 1984; Silver & Glicken, 1990; Wolf et al. 1988). Author and physician Danielle Ofri (2013) captures the sentiments of this transition well when she writes "…the entry into the clinical world can be an intensely disorienting experience. Complications, drug interactions, patient idiosyncrasies, medical errors, insurance issues, and emergencies keep life frenetic. Everything—from the smell of infected bedsores and the insistent clanging of alarms to the foreign language of hospital lingo and the capriciousness of death—serves to create a disconcerting world. In the midst of this are the greenhorn medical students, acutely aware of their lack of practical skills to do anything of use."

In one study examining student emotionality in medical school, students reported feelings of anxiety and tension with their first patient encounters, as well as helplessness and uncertainty when faced with serious illness and death (Pitkala & Mantyranta, 2004). Additionally, students often experience insecurity as they enter medical practice for the first time, feeling as though they are ”not at ease,” and “not sure” when faced with patients (Helmich et al., 2012). While one study found that students transitioning to the clinical wards experienced positive emotions such as feelings of being moved, tenderness, and respect, they were also seen to have experienced distressing emotions such as powerlessness, sadness, and fear (Helmich et al., 2011). Confirming

this range of emotions, a different study of third-year medical students concluded that although students found patient contact rewarding, they continued to feel anxious, stressed, and fearful of not being competent (Shapiro, 2011).

There has also been compelling research examining students' first experiences with death and dying that has found that patient mortality is a highly emotional experience for students, with the two most common adjectives used to describe the experience with patient death being "sad" and "shocking." (Rhodes-Kropf, 2005). Another study found that students struggled to balance the perceived need for objectivity with their tendency to identify with patients and react emotionally to their deaths (Ratanawongsa, 2005). This study was complemented by findings by Kelly (2010) who found that "tension between emotional concern and professional detachment was pervasive among medical students undergoing their first experience of the death of a patient in their care" (p. 1).

Additionally, there have been studies investigating students' experiences with professionalism dilemmas. In other words, events whereby students witness or engage in something they believe to be unethical, immoral or wrong (Christakis & Feudtner, 1993; Monroux, 2012)). Common professionalism dilemmas reported across these studies involve students experiencing a conflict between their learning and patient care, students witnessing (or participating in) breaches of patient dignity (e.g., communications violations) or patient safety (e.g., errors), and students experiencing abuse (Monroux, Rees, & McDonald, 2013). In response to these ethical dilemmas, students overwhelmingly reported feeling bad or guilty, as well as feeling as though their moral principles had been eroded or lost (Feudtner, Christakis, & Christakis, 1994).

So, while it is clear that medical students are experiencing emotional distress as a result of their transition to clinical environments, what does the literature suggest about how medical students are responding to and dealing with these emotions? These responses are significant because, within the field of medicine, being able to deal with emotions is considered a critical feature of medical students' and doctors' overall clinical performance, including diagnostic processes, medical decision making, and interpersonal relationships (Croskerry et al. 2008). Further, emotion is recognized as a core element of professional values, attitudes, and beliefs and is espoused in humanistic approaches to professional activities, including diagnosis, counseling and patient management (McNaughton, 2013). Unfortunately, literature suggests that medical students are not only experiencing distressing emotions such as anxiety, powerlessness, sadness, and fear but also struggling with their response to these emotions as well.

Medical Student Responses to Emotions

One of the most common responses by medical students to intense or difficult negative emotions is suppression, as students often felt that their emotions were hampering effectiveness in performing a task (Doulougeri et al., 2016). Specifically, research has suggested that to survive one must learn to suppress inner feelings and to objectify patients (Conrad, 1988; Lella & Paweluch, 1988). Further, students learn that through objectifying and intellectualizing their "emotionally-laden" experiences they can distance themselves from their initial pangs of anxiety and fear (Angoff, 2013).

One study echoed this with a quote by a student that expressed that "those feelings just get in the way. They don't fit, and I'm going to learn to get rid of them. Don't know how yet and some of the possibilities are scary" (Lewis et al., 2005). An additional study examining medical students' early experiences in the clinical setting confirmed this finding and suggested that

students tended to minimize the impact of their feelings and emphasized that they did not like to talk about how they were affected, even explicitly stating that emotional reactions are something one just has to get used to (Helmich, 2012). While this strategy addresses the emotions in the short term, the long-term result is that suppression of the intense emotions that arise in the face of death, disability, medical error, and one's own mortality is exhausting and, in turn, can lead to burnout and compassion fatigue (Shapiro, 2011).

While some studies have found students utilizing more positive outlets for their emotions, such as talking to friends and family, exercising, music, therapy, or prayer, most students stated that time pressures and fatigue hampered their ability to utilize these activities as they did prior to starting medical school (Ratanawongsa, 2005; Rhodes-Kropf, 2005). Also, these strategies are very individual and rely much more on happenstance and convenience rather than any structured resources provided by the school (Rhodes-Kropf, 2005). Opponents to these methods would suggest that they reinforce the belief that emotions should be defined as individual and private and this belief, in turn, has the potential to add to increased student isolation and burnout (McNaughton, 2013).

Additional studies suggest that students detach from or depersonalize their patients to manage their emotions in clinical settings. In particular, medical students are susceptible to excessive detachment because they are still learning how to modulate their emotions within intense clinical environments (Jennings, 2009). In turn, as many as three-fourths of medical students become increasingly cynical about academic life and the medical profession as they progress through medical school (Sheehan et al., 1990). In particular, one student noted that "I have felt overwhelmingly tired and unempathetic at times—It is the feeling where, upon walking into a patient's room, I am thinking more about getting through the encounter expeditiously than

about making a connection with the patient. AND, I have always considered myself an empathetic person" (Hojat et al., 2009).

Perhaps not surprisingly, then, the third year also marks a time when medical students become less empathetic as it relates to patient care (Hojat et al., 2009; Hojat et al., 2004). Countless studies have examined the degradation of empathy during medical school as students transition from the safety of the pre-clinical years to the clinical environment (Chen et al., 2007; Hojat et al., 2009; Neumann et al., 2011; Wolf et al. 1989). One large-scale longitudinal study found that mean empathy scores decreased by over one-half standard deviation during the third year of medical school, with no significant improvement during the fourth year (Hojat et al., 2009).

Implications

The implications of these responses to difficult emotions by medical students can be far reaching. In fact, research has found that rates of burnout, depression, stress, and suicide ideation continue to be alarmingly high for medical students compared to their age-matched peers (Dyrbye et al., 2006; Gentile & Roman, 2009; Goebert et al., 2009; Mayer et al., 2016; Schwenk et al., 2010). Specifically, approximately 50% of students experience burnout, up to 30% experience depression, and 11% report suicide ideations (Brazeau et al., 2010). The high rates of burnout have been particularly troubling, as a recent study found that students with burnout were shown to have an increased likelihood of depression, a less positive perception of the learning environment, and more stress and fatigue (Dyrbye, Power, & Massie, 2010). Those experiencing burnout are also two to three times more likely to have suicidal ideation compared to classmates who are not experiencing burnout (Thompson et al., 2016; Dyrbye et al., 2008).

What is specifically troubling about these rates is that research suggests that at the start of medical school, medical students have mental health similar to nonmedical peers, but student's mental health worsens during medical training (Jafari, 2012; Rosal et al., 1997; Amini, 2009; Lomis, 2009; Goebert et al., 2009). Perhaps even more concerning is the fact that these alarming rates of distress do not end with the conclusion of medical school but continue right on through into medical practice. In fact, data suggests that physicians are at higher risk for emotional exhaustion (32.1% vs 23.5%), depersonalization (19.4% vs 15.0%), and overall burnout (37.9% vs 27.8%) ($P < .001$ for all) compared to the general population (Shanafelt et al., 2012). Moreover, physicians are more than twice as likely to kill themselves as nonphysicians and have the highest suicide rate of any professional group (Lindeman, 1996).

Research Problem

As the research above suggests, medical student distress and emotional wellbeing in medical school has reached a crisis point in the U.S. (Greenberg, 2016). In particular, the research points to unique challenges that medical students face as they transition into the clinical years of their medical school training for the first time. However, what is lacking in the literature is a comprehensive understanding of *how* students experience and respond to the emotional challenges that accompany the various stages of training to become physicians (Eikeland et al., 2014; Helmich et al., 2012). Specifically, what are the ways in which emotions are manifesting in the lives of medical students as they enter clinical environments for the first time? Thus, this study aims to examine what it is like for medical students to experience, respond to, and make sense of their emotions within the clinical settings of the third year of medical school.

Purpose of Study

The purpose of this study is to gain an understanding of how medical students experience, respond to, and uncover meaning related to their emotions in the clinical settings of the third year of medical school. This will serve to contribute to current literature by providing insight into the ways in which emotion is lived as a product of "being in" the clinical years of medical school. In turn, this research can lead to more comprehensive wellness interventions that are able to target not only medical students in their clinical training years of medical school, but the clinical systems within which they train as well.

For this study, I examined emotions from a phenomenological perspective. Specifically, a phenomenological perspective on emotions takes a "first-person approach to the emotions that is guided by, rooted in, and engaged with our experiences in the world, where the felt quality of emotions provides important insights into the meaningfulness of human experiences" (Elpidorou & Freeman, 2014, p. 1). So, I believe it is important to understand not just what types of emotions students are experiencing, but how students are uncovering meaning about themselves and their roles within the clinical settings through these emotional experiences. To this end, my study will be guided by the following research questions:

(1) What is it like for medical students to experience emotion in the third-year clinical settings of medical school?

(2) How are medical students responding to their emotions in clinical settings?

(3) How is meaning being revealed to medical students through their emotions?

In the next chapter, I begin the literature review by exploring the literature on emotions, unpacking the various ways emotions have been defined, and underscoring the need for a phenomenological approach to this construct in the context of exploring the lived experience of

medical student emotionality. I will then give an overview of the sociological research and literature within medical education that has examined the lives of students, highlighting the gaps in this research, particularly as it relates to what it has and has not told us medical student emotionality during medical school.

CHAPTER TWO: REVIEW OF THE LITERATURE

Emotions in the Literature

When exploring a more abstract phenomenon such as emotions, it is first necessary to define its terms from a scholarly perspective. In this case, as it turns out, finding consensus on a definition of emotions within the broad base of literature is a notoriously tricky task. This difficulty is partly because the different professional disciplines, such as psychology, sociology, medicine, philosophy, anthropology, and education, each approach this topic from slightly different perspectives (McNaughton, 2013). With this being said, it is possible to identify two overarching frameworks related to the study of emotions in the humanities and social scientific literature; namely the ‘emotions as inherent' and the ‘emotions as socially constructed' perspectives (Lupton, 1998). While these categories are less of a duality and more of a continuum, it does give a starting place from which to begin organizing our thoughts about the study of emotions.

Emotions as Inherent

While the study of emotions within the humanities and social science literature has spanned some 150 years, the predominant view for much of the 19th and early 20th century was consistent with viewing emotions from the ‘inherent' perspective (Lewis, Haviland-Jones, & Barrett, 2008). Research from this perspective, which is sometimes referred to as the ‘positivist' or the ‘traditional' approach, is generally directed towards such tasks as identifying the anatomical or genetic basis for the emotions, showing how emotions are linked to bodily changes, seeking to explain the function served by inherent emotions in human survival, or identifying which emotions are common to all human groups (Lupton, 1998). The classic example of this perspective is the fight-or-flight response that is evoked in humans when they

encounter a particular stimulus. From a historical sense, much of this work stemmed from Darwin's theory of evolution, which implied that there was an evolution not only of physical structures but of "mental" and expressive characteristics as well (Plutchik, 1970).

Soon after Darwin's work came out, William James published ‘What is Emotion?' which, alongside Darwin's *The Expression*, are probably the most-read psychological texts on emotion (Plamper, 2015). James' view was that an emotion is a conscious feeling arising from sensations in the viscera and skeletal muscles, which comes after a state of bodily arousal and not before it (Plutchik, 1970). Specifically, the physical response is seen to precede the emotions and is interpreted in certain ways based on the judgment of the situation (Lupton, 1998). This concept is often referred to as a cognitive theory of emotion, which suggests that emotional behavior remains an essentially physiological response to external stimuli but often mediated by processes of judgment and assessment or appraisal (Dirkx, 2008). So, for example, a soldier's hand on the battlefield may begin to tremble, and this trembling elicits the feeling of fear.

The ‘Emotions as Inherent' perspective dominated much of literature related to emotions into the mid part of the 20th century. In particular, researchers wanted to ensure this domain of emotions was one of scientific study rather than philosophy or religion. However, what this resulted in was a usage of "emotion" in which the relationship between mind and body and between thought and feeling were confused and unresolved (Dixon, 2012). In turn, "the emotions" named a category of feelings and behaviors so broad as to cover almost all of human mental life (Dixon, 2012). Due to this problem, the study of emotions began to focus on a more unchanging set of functional concepts, which started to emerge in the 1960s through the modern day. However, these rigid constructs of emotion, as well as the other models that posit emotions are inherent, still left unanswered questions. Namely, how universal are human emotions? Do all

cultures experience emotions the same? Can emotions be learned? It is from these questions that gave rise to the study of emotions as constructed, rather than a universal, unchanging element of our personhood.

Emotions as Constructed

While the ‘Emotions as Inherent' view was the dominant perspective on the study of emotions for the first century or so, a new approach started to emerge around the latter half of the 20th century. Specifically, the view of emotions as a social construct began to emerge in the 1970s as scholars began to conceptualize emotions more explicitly and develop theories and research programs for their study (Turner, 2009). This perspective approaches the study of emotions as learned rather than inherited behaviors or responses and tends to be rooted in the sociological domain more so than that of psychology or biology (Lupton, 1998). Thus, having largely rejected the influence of biology on emotions, social constructionists generally argue that cultural prescriptions and social norms are the most important determinants of emotion (Kemper, 1981). This is not to say that there are not varying perspectives within the ‘Emotions as Constructed' viewpoint, as there are several different theorists that fall within this functional area that I will continue to explore below.

One of the early pioneers of the exploration of emotions as a social construct was Catherine Lutz, who conducted fieldwork on Ifaluk Atoll in the South West Pacific in 1977 (Plamper, 2015). Interestingly, her purpose in studying this group of people was to challenge some of the Western thinking and assumptions relating to the use of the word "emotion." Notably, she suggests that the Western view of emotions is predicated on the belief that emotion is, in essence, a psychobiological structure and an aspect of the individual, with the role of culture seen as secondary (Lutz, 2011). However, her findings would suggest that "emotional

experience is not precultural but *preeminently* cultural…the prevalent assumption that the emotions are invariant across cultures is replaced here with the question of how one cultural discourse on emotion may be translated into another" (Lutz, 1988). So we start to see this emerging movement in the 1980s of researchers beginning to examine what Hochschild (1979) labels as the "feeling rules" of various cultures.

While Lutz's work in examining the cultural construction of emotions is perhaps the most noteworthy, she was certainly not alone in framing her examination of emotions from this lens. There was a range of perspectives on the role that culture plays in shaping one's emotions, typically depicted on a continuum from ‘weak to ‘strong' in reference to the amount of influence from sociocultural means. For example, while Lutz might be considered to fall more on the strong side of the spectrum, others, such as Durkheim (1961, 1984) adopted a less rigid perspective on the role of culture. Durkheim (1984), who studied aboriginal tribes in Australia, suggested that there is a sphere of psychological life which, no matter how developed the collective type might be, varies from one person to another and belongs by right to each individual. He would suggest that the emotions and drives that are a part of human physiology are multiplied and diversified because they become directed or attached to objects that would not exist apart from the social milieu (Fisher & Chon, 1989). While both of these researchers approached the study of emotion from more of a cultural anthropological approach, sociologists were also examining emotions from a constructivist perspective during this period.

Emotional Labor

One of the most notable sociologists to explore the role of emotions during the 1980s was Arlie Hochschild's examination of what she labeled ‘emotional labor' in her book *The Managed Heart* (1983). In it, she specifically looked at employees in the service industry and defined

emotional labor as “the labor one uses to induce or suppress feelings in order to sustain the outward countenance that produces the proper state of mind in others” (Hochschild, 1983, p. 7). She suggested that those who struggled to bring their ‘true' feelings in line with those which are demanded experienced ‘*emotive dissonance*,' analogous to the principle of cognitive dissonance (Hochschild, 1983). This concept was quite revolutionary at this time, and its publication marked the emergence of an autonomous field of study in the sociology of emotion when in 1986 the Section for the Sociology of Emotion was formed as a part of the American Sociological Association (Plamper, 2015). Sociologists, then, study emotions mainly from an *interactionist* model of emotion, which suggests that individuals make sense of emotions through their understanding of the social environment in which the emotions are experienced (Morris & Feldman, 1996). While the field of sociology continues to contribute valuable research to the study of emotions, the 1990s gave rise to a new approach that examined this topic from a more unified and sociocultural perspective.

Sociocultural Perspective

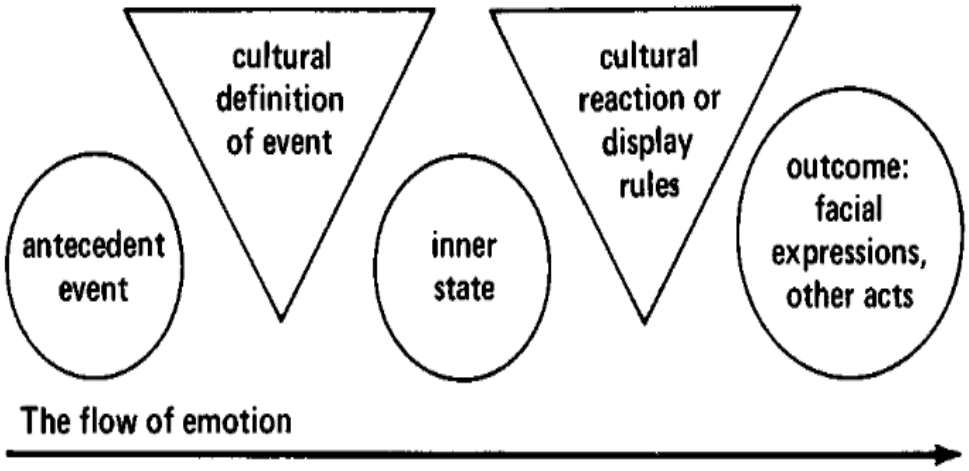
During the 1990's research in emotions began to bridge the gap between universalism and constructivism, with researchers attempting to adopt a mediating position between the poles of social constructivism and universalism (Plamer, 2012). One of the leading scholars in this shift was the sociologist Pierre Bourdieu. Specifically, he developed a conceptual framework that rendered the dichotomies useless, instead emphasizing how the embodied agent is shaped by, but also shapes, society in a more integrated fashion (Zembylas, 2007). From his point of view, automatic behaviors and reflexive categories to which emotions have traditionally belonged are not "purely biological," but better thought of as habits emerging where bodily capacities and cultural requirements meet (Scheer, 2012). So what this viewpoint does is bring the body back

into the equation, by suggesting that, over time, our emotions are practiced and developed within our bodies, but learned in social settings.

This shift was also evident in the field of anthropology, where researchers like Karl Heider examined how linguistic differences in cultures around the world map onto emotional states (Ekman et al., 1987). Specifically, Heider gathered up words that could be classified as emotional in their respective cultures and drafted ‘cognitive maps' for their semantics, graphic representations of relationships of meaning within one language and between different languages (Plamper, 2015). What he found is that emotion is less a condition then it is a process, with cultural definitions and cultural rules impacting the outcome of an emotion (Ekman et al., 1987). The diagram for this process found in Figure 1 below gives a visual representation of this process. What is interesting about this graphic is that is it situates emotion, as Heider suggests, as a process where emotional scenarios follow a path where cultural interventions influence how the emotion is manifested.

Figure 1:

The flow of emotion



This model represents important progress in the study of emotions. For instance, this model incorporates elements of the constructivist viewpoint, with components of stimulus-response as well as the appraisal approach to the emotions. However, the intervening variables, in this case, represent a *sociocultural* framework in that the way emotions are experienced and expressed is deeply embedded in a socio-cultural milieu that perhaps shapes our emotions.

While this framework represents an important step in the study of emotions and emotionality, what about the study of emotions within medical education? Has it adopted a similar view of emotions within the literature exploring the role of emotions in medicine? As the next section might suggest, it has not. Thus, my proposed study will examine an important gap in the literature by approaching the study of emotions from a sociocultural lens, adding to the current state of the research within this field.

Emotions in Medical Education

The explicit examination of the emotions within medical education is a relatively recent pursuit, with the past two decades witnessing an increase in research investigating the effects of emotion on learning and performance in medical trainees (McConnell et al., 2016 & Helmich et al., 2013). In this time, there have been many different conceptualizations of emotionality in medical school. However, two main discourses on this topic tend to emerge in the medical education literature: (1) emotions as skills and abilities, and (2) emotions as a socio-cultural discourse. In general, the "emotions as skill" discourse aligns closely with the broader literature on emotionality that frames emotions as inherent. The "emotions as socio-cultural" discourse, on the other hand, is aimed at examining the more systemic and organizational drivers of emotionality in the clinical settings. While both discourses have made essential contributions to

the literature examining emotions in medical education, medical educators increasingly have tended to adopt a purely cognitive (or skill-based) approach to defining the construct (Shapiro, 2011).

Emotions as Skill

The emotions as a skill perspective situates the study of emotions within an ‘emotion as skill' discourse, which connotes that emotion skills, much like physical examination skills, can be regarded as a properly defined, teachable (and measurable) skill set that supersedes patient diagnoses or socio-cultural backgrounds (Satterfield & Hughes, 2007). In turn, the "emotions as skills" discourse perpetuates the assumption that, if not overruled by cognition, experiencing emotion can lead to burnout and compassion fatigue (Hojat et al., 2009). Specifically, emotional intelligence (EI) is the dominant technology through which particular ideas about emotion become operationalized in medicine, blending the concepts of ‘intelligence' and ‘emotion' along a trajectory related to ideas about ability, skills acquisition, and performance (McNaughton, 2012).

However, while framing the study of emotions within a psychological construct like intelligence allows for it to be quantified and measured, there are some challenges with the conceptualization of emotions from this vantage point as well. For starters, the notion of emotional intelligence in and of itself perpetuates the sanitization of emotions in medicine by turning emotional constructs like suffering, compassion, and sensitivity into a set of cognitive and behavioral skills, which are safely remote from their personhood (Shapiro, 2011). Emotional intelligence, then, situates the study of emotions within an ‘emotion as skill' discourse, which connotes that emotion skills, much like physical examination skills, can be regarded as a

properly defined, teachable (and measurable) skill set that supersedes patient diagnoses or socio-cultural backgrounds (Satterfield & Hughes, 2007).

Second, an individual's EI is distinct from his or her disposition to experience certain types of emotion, nor does it relate to how intensely he or she experiences emotions (Cherry et al., 2014). Lastly, and perhaps most relevant to this proposed study, is the fact that emotional skills are very different from other kinds of learned skills in that they are relational and context-dependent, and in medicine, it is important to recognize the dynamic systems at work (Lewis et al. 2005). Thus, it is imperative that research examining the emotions that students experience in medical school move beyond a static, individualized conceptualization of emotion to one that is collaborative and dynamic (Lewis et al., 2005).

Further compounding the problem in medical education is the fact that current interventions addressing medical student well-being are aimed at individual trainees, rather than at the organizational or structural level (West, 2015). This means that efforts to improve student mental health have mainly focused on improving access to mental health providers, reducing the stigma and other barriers to mental health treatment, and implementing ancillary wellness programs (Slavin, Schindler, & Chibnall, 2014). While these programs are noble and have shown some success in helping students develop strategies to combat stress and burnout, they fail to address the structural and organizational components that may be contributing to this negative state of well being. As Epstein & Privitera (2016) suggest, "treatment of burnout solely as a disease or failure of individual practitioners is unlikely to be effective. Rather, the individual and system drivers of burnout also need to be addressed."

Sociocultural Examinations of Emotion in Medical School

The incorporation of sociological research to medical education was a direct result of an interest in learning about the ways in which medical students are socialized professionally while in medical school. The official "launch" of medical education's foray into the examination of the socialization of medical students came with the publication of *Boys in White* (Becker, 1962). This book was quite pioneering at its time due to the researcher's total immersion in the lives of medical students over the course of weeks and months. *Boys in White* took medicine as an object of study, creating a sub-field within US medical sociology called the sociology of medical education (Nunes, 2014). While little was done in the subsequent years to build on this foundation, the past 15 years have seen a resurgence of interest in medical education from a sociological perspective (Emmerich, 2013).

While socio-cultural perspectives of emotion in the field of medical education are still underdeveloped, they are emerging and offer rich opportunities for future contributions (McNaughton, 2013). Much of the research from this perspective has focused on how students are effectively "socialized" in clinical settings to manage their emotions in particular ways. Specifically, this process of becoming a professional is called "professional socialization" or "professionalization" and is an essential component of health education (Arndt et al., 2009). Merton (1957) described professional socialization as: "…the transformation of individuals from student to professional who understand the values, attitudes, and behaviors of the profession deep in their soul. It is an active process that must be nurtured throughout the professional student's development" (as cited in Mylrea et al., 2015). While socialization occurs through formal teaching, informal instruction is more influential (Goldie, 2012). This informal instruction is often called the "hidden curriculum" of medical school, which refers to learning that occurs

through informal interactions among students, faculty, and others or learning that occurs through organizational, structural, and cultural influences intrinsic to training institutions (Gaufberg, 2010). Some authors suggest that this hidden curriculum continues to reinforce norms against physicians' displaying or even allowing themselves to feel or acknowledge emotion (Hafferty, 1998).

Relating to this idea of the hidden curriculum, one of the prevailing norms in medicine as it relates to the role of emotions in the clinical setting has been one of "detached concern"(Lief & Fox, 1963). In other words, a distancing or detachment, when balanced with the appropriate amount of concern for the patient, has long been considered a recipe for empathy in the patient-physician relationship (Angoff, 2013). For the first time, then, medical students come face to face with a professional setting with deeply entrenched standards, norms, and expectations about how one should behave, think, and act in a clinical setting (Vaidyanathan, 2015). As Dr. Danielle Ofri, author of *What Doctors Feel* (2013, pg. 30) puts it, "their ideals of medicine as a profession are pummeled by their initiation into the real world of clinical medicine."

In turn, while calls to address the topic of emotions in medicine have emerged periodically, these appeals have not led to pervasive curricular changes because they pose challenges to the existing cultural norms of medicine (Shapiro, 2011). Specifically, the cultural norms of medical education promote emotional detachment, affective distance, and clinical neutrality (Coulehan, J. 2005; Evans, B. et al., 1993). In short, medical culture does not acknowledge the physician's need to experience and process personal feelings (Jennings, 2009). As stated by Coulehan and Williams (2001) "North American medical education favors an *explicit* commitment to traditional values of doctoring – empathy, compassion, and altruism among them – and a *tacit* commitment to behaviors grounded in an ethic of detachment, self-

interest, and objectivity." It is precisely these aspects of the hidden curriculum that, in some cases, have just as much impact as the formal aspects of the curriculum (Neuman et al. 2011).

Additionally, research examining student narratives of the hidden curriculum in the clinical years reveals even more telling information related to the construction of emotions in medical school. This is particularly evident in the student's responses to open-ended questions asking about experiences in this setting. For example, one student stated, "It's like I just took all those real human feelings…and I crammed them, reorganized them, and dehydrated them to fit in a succinct little box. 'This patient fits into this rubric.' I get angry just thinking about it." (Gaufberg et al., 2010). Another student perceived from their training experience that the "humanistic side of medicine is too soft and a waste of time…I worry that over time I will be 'molded by the system' into this idea" (Hojat et al., 2009). Of course, these experiences are not the intentional aim of any medical education experience, but they indeed shape students in profound ways.

Justification

What I focused on in my research is how students are experiencing and coming to understand and make meaning of their emotions within the clinical settings of medical school. In particular, I examined how emotions manifest themselves in the lives of medical students engaged in the clinical clerkships of the third year of medical school. Ultimately, a deeper understanding of the "when, where, and how" of these emotional experiences might better prepare medical educators to aid students in the development of positive coping strategies for their emotions as well as develop institutional level interventions.

One of the benefits of undertaking a study of emotions from a phenomenological perspective is that it can allow us to better understand what being a medical student is like. As

Van Manen (1990, p. 10) puts it, this type of work will help to "uncover and describe the internal meaning structures of lived experience." Thus, I argue that this research will serve to uncover these meaning structures through deeply exploring what it means to be a medical student and experience very real and raw human emotions while in clinical education settings. Further, these emotions often represent powerful stimuli for the development of professional values and identity (Branch et al., 2005). So, this study will contribute to this identified gap in the literature through interviews with medical students who are working to engage in regular management and sense-making of their emotions in the field.

In the next chapter, I will outline the specific methodology I used as well as the framework that was used to anchor the data gathering and analysis of this research study. In sum, by understanding and recognizing *how* emotions are felt, we can better understand the lived experience of medical students and, in turn, better understand how these experiences shape their understanding of themselves and how they perform as practicing professionals.

CHAPTER 3: RESEARCH DESIGN AND METHODS

This chapter provides an overview of the research methodology, including a justification for the use of phenomenology, research questions, site and sample selection, data sources and analysis methods. The purpose of this study is to gain an understanding of how medical students experience, respond to, and come to understand themselves through the emotions they experience in the clinical settings of the third year of medical school. Specifically, I wanted to explore the lived experiences of medical students who were engaged in the clinical clerkships of the third year of medical school. To do this, I used a phenomenological approach to examine how medical students experience and discover meaning in their emotions in medical school. This approach was well suited to this study because the purpose of phenomenology as a research methodology is to get at the truth of matters; to describe phenomena as they manifest to the experiencer in the lifeworld - the world as we immediately experience it pre-reflectively rather than as we conceptualize, categorize, or reflect on it (Husserl, 1970b; Schutz and Luckmann, 1973). So, phenomenology aims at gaining a deeper understanding of the nature or meaning of our everyday experiences by asking, "What is this or that kind of experience like?" (van Manen, 1990, p. 9).

In terms of medical students and their emotions, this phenomenological account examined how medical students experience their emotions in clinical settings. In staying true to the phenomenological method, this study looked at what it is like as we *find-ourselves-being-in-relation-with others* (e.g., student with patient, student with student, student with doctor) and *other things* (e.g., some bad news, our favorite activity, an anxiety) (Vagle, 2018, p. 20). In other words, I am not merely interested in the emotions that students experience, but how they find themselves *in relation* to their emotions as they are experiencing them. In this way, the unit of

analysis for this study is the way in which emotions (i.e., the phenomenon of interest) manifest and appear in and through medical student's lifeworld.

Research Questions

This study will be examining the essence of how emotions manifest themselves in and through the lives of medical students as a product of "being in" the clinical years of medical school. The following research questions will be explored:

(1) What is it like for medical students to experience emotion in the third-year clinical settings of medical school?

(2) How are students responding to their emotions in the clinical settings?

(3) How is meaning being revealed to medical students through their emotions?

Phenomenology

I conducted an interpretive phenomenological study of how medical students experience, respond to, and frame the understanding of their emotions in medical school. Specifically, I explored the lived experiences of medical students who were engaged in the clinical clerkships of the third year of medical school, with the intention of gathering information on the essence of the way medical students experience emotion. The critical aspect of this methodology is that it is deeply committed to the description of experiences, not explanations or analysis (Moustakas, 1994). In turn, the core of my description was "the things in their appearing," focusing on experience as lived for medical students. It was critical, then, that I was careful to have students describe their stories as they appear to their consciousness, and not as what they picture as common sense (Moran, 2002).

Phenomenology, in particular, thematizes the phenomenon of consciousness and, in its most comprehensive sense, refers to the totality of lived experience that belongs to a single

person (Giorgi, 1997). In this case, medical students are not simply passive spectators to their emotions but are bound up with them as participants. Thus, this study sought to examine what this is like and what types of socializing influences on emotions are present for the experiencer.

Interpretative Phenomenology

Due to the desire to understand how students are coming to understand and make meaning of their emotions, and how this meaning-making is shaped and influenced by the educational environments in which they are situated, I approached this study from an interpretivist framework. Specifically, "interpretive researchers assume that access to reality (given or socially constructed) is only through social constructions such as language, consciousness, shared meaning, and instruments" (Myers, 2013, p.38). Within phenomenology, the interpretive tradition stems from work done by Heidegger (1927) in the 1920s where he introduced the concept of *Dasein*. Specifically, **Dasein** is a German word that means "being there," which Heidegger used to explore our own understanding of our human Being (Davidsen, 2013). Specifically, *Dasein* reflects the notion of a "living being" through their activity of "being there" and being in the world (Cerbone, 2014). So *Dasein*, in a way, invokes our human way of being.

In particular, Heidegger (1927) suggests that to analyze *Dasein* one must explore being in the world in the context of "being with others" (Horrigan-Kelly, Millar, & Dowling, 2016). He suggests that in "being with others," Dasein is an entity that conforms unquestioningly to societal norms and values, thus losing selfhood (Horrigan-Kelly et al., 2016). So, in Heideggerian phenomenological research, intended meanings are conceived in being and language, which are always found "in" intersubjective relations (Vagle, 2018). Further, phenomena are not directed from subjects out into the world, but rather come into being and in language as humans relate

with things and one another "in" the world. In other words, our being is not separate from the world, but is in and of the world. In this way, I will be examining the nature of what it is like for students to be *in* clinical settings while experiencing deep or distressing emotions in medical school.

This style of phenomenology is often referred to as hermeneutic phenomenology in that there is a strong focus on the art and methodology of interpretation. More specifically, interpretation is seen as critical to the process of understanding (Laverty, 2003). So, the important thing to note here is that within this framework there is great emphasis put on the researcher's ability to make sense of meaning and explicate it in a way that illuminates or brings forth the meaning of a phenomenon for a reader.

Interpreting what is understood, then, means explicitly articulating, making intelligible, laying out, unveiling, or thematizing its "as-structure" (Stolorow, 2006). So, my goal will be to articulate and thematize *emotions as experienced* by medical students. The unit of analysis, in this case, is how emotions manifest and appear in and through medical student's clinical lifeworld. From this research, I hope to be able to describe how students come to understand their emotions through the filter of the clinical setting and the messages they receive about emotionality in their profession.

Research Method

One of the challenges researchers often face in using phenomenology is how to shift from the philosophical underpinnings of phenomenology to putting it into practice as a research methodology. Fortunately, there have been many scholars who have put forth meaningful methodological processes that one can follow for guidance on structuring phenomenological analysis and writing. One of the most prominent phenomenological writers to operationalize

aspects of this methodology was the Canadian phenomenologist Max van Manen. van Manen's approach to research is rooted in hermeneutic phenomenology, which he suggests is interested in the human world *as we find it* in all its variegated aspects (1990). He goes on to suggest that "to do hermeneutic phenomenology is to attempt to accomplish the impossible: to construct a full interpretive description of some aspect of the lifeworld, and yet to remain aware that lived life is always more complex than any explication of meaning can reveal" (1990, p. 18). However, rather than giving up on this task altogether, van Manen suggests we pursue it with extra vigor and offers six methodological activities to achieving success in hermeneutic phenomenological human science research.

Phenomenological Methodology

van Manen's (1990) hermeneutic approach to conducting phenomenological research includes the following six research activities:

1. Turning to a phenomenon that seriously interests us and commits us to the world.
2. Investigating experiences as we live it rather than as we conceptualize it.
3. Maintaining a strong and oriented pedagogical relation to the phenomenon.
4. Balancing the research context by considering the parts and the whole.
5. Reflecting on the essential themes which characterize the phenomenon.
6. Describing the phenomenon through the art of writing and rewriting.

These six research activities are the framework by which I approached the methodological structure of this paper. While van Manen (1990) suggests that these methods form the foundation of the research process, they are not to be thought of as "steps" so much as themes that are in dynamic interplay with each other. In my case, each of these steps occurred across the study and each research activity was revisited frequently throughout the research process.

However, in terms of organization, the breakdown of how these research activities will unfold throughout the paper will be as follows:

(A) Research activities one and two will be outlined and described here in Chapter 3.

(B) Research activities three, four, and five will all occur in Chapter 4.

(C) Research activity six focuses on the description of the phenomenon and will be unpacked in Chapter 5.

In the remainder of this chapter, I will address how research activities one and two were addressed during this study.

Research Activity 1: Turning to a phenomenon that seriously interests us and commits us to the world

This step is a crucial starting point for all phenomenological research. As van Manen (1990) so aptly suggests, "every project of phenomenological inquiry is driven by a commitment of turning to an abiding concern" (p. 31). For me, many factors led me to explore the current topic of this study. One of the most prominent would be the fact that I currently work full time and conduct research at a medical school. I work as an admissions counselor and am part of a research team exploring emotional intelligence in medical students. Before coming into this role, however, I completed an advanced degree in professional counseling. While in the program, I became very interested in the intersection of student development and emotional development, as there seemed to be many parallels between the two. My work on campus was in residence life, and I indeed saw my fair share of emotionality within the profession, both positive and negative, that seemed to shape so much of each student's journey through college. So, once I arrived here at the medical school, I continued to notice the ways that the emotional life of medical students tended to determine success for many while in medical school. Whether it was stress, burnout,

anger, joy, loneliness, inadequacy, it seemed that these emotions were quite salient and were spilling over into many other aspects of medical students' lives. These emotions seemed only to be compounded in clinical years, where research supports the notion that many students struggle with reconciling the emotionally laden experiences they are encountering for the first time as a medical professional (Helmich et al., 2012; Pitkala & Mantyranta, 2004; Ratanawongsa et al., 2005;).

Simultaneously, I was a part of a research team examining emotional intelligence (Salovey & Meyer, 1990) as a potential framework for exploring the factors that might lead to success in medical school. While this framework certainly provided a lens into the emotional lives of medical students, it didn't quite fit the types of things I was observing. Additionally, this framework came with certain assumptions about the role of emotions in medical school environments. Namely that they can be managed and regulated such that they are the same as teaching a clinical "skill." Based on my previous work in counseling (specifically from a Rogerian, or person-centered, perspective), my assumptions fall more in line with a constructivist framework, in that meaning making is tentative and dynamic, rather than fixed (Rogers, 1985). Thus, my goal was to enter this meaning-making process to see how and why emotions are impacting medical professionals, and how medical students are uncovering meaning through their own emotionally laden experiences.

Once I had firmly established my research goals and questions, I then shifted into the investigative work of phenomenology. Or, as van Manen (1990, p.32) puts it, I "stood in the fullness of life, in the midst of the world of living relations and shared situations." This next section will outline how I went about engaging in this fullness of life with current medical students participating in their third year of medical school.

Research Design

Based on my research goals, I interviewed medical students to examine what students who are in early clinical experiences experience, in terms of emotions, how they responded to these emotions, and how meaning is being revealed to students in and through these emotions. I was also interested in learning, specifically, what kind of problems or challenges they were confronted with in terms of being able to express emotions, and how they dealt with these problems.

Interviews

I conducted this research in twelve separate one-hour interviews with twelve different medical students who attended a public medical school in the Midwest. During the interviews, I used the phenomenological method to have the medical students tell me a story about an encounter with strong emotion(s) during their third year of medical school. Specifically, I explored the manifestation of emotions within their work, such as anger, grief/loss, and feelings of inadequacy and what it was like to experience these in the clinical setting. So, I had the students tell me a story about their emotions in the clinical settings and how these emotions manifested themselves in the context of their work.

My assumption was that students would be living their lives through emotions, and it is their emotions that would give their lives meaning (Solomon, 2007). Further, I hoped that giving this emotional life a voice and a narrative would bring life to this topic in a new way, illuminating the ways we have failed to capture the essence of what medical students feel. During these interviews, then, I was able to glean information about what it is like to experience emotion in the clinical setting and how students' emotions are shaped and influenced by the environments in which they work and practice. The questions I used as the framework for my

interviews may be found in Appendix A.

Participant Selection

For this study, I used phenomenological interviews as my primary source of information. This approach is appropriate because a humanistic approach is focused on gaining an understanding of a particular phenomenon through the eyes of the person who is experiencing it. Specifically, I wanted to learn about what it was like for students to experience emotion in clinical settings in which learning and patient care are the primary focus of their role. Thus, I focused on third-year medical students who were in the clinical settings of medical school as the predominant modality of teaching and learning

All participants in this research were selected from a single medical school in the Midwest. Initially, I reached out via email to the entire class of students who were currently enrolled in their third year of medical school to participate in this study. From that group, I had twenty-five students respond. I narrowed that list to twelve total medical students who were in their third year of medical school using purposeful sampling.

Purposeful sampling involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest (Cresswell & Plano Clark, 2011). It is primarily used when a researcher is looking for participants who have the ability to communicate experiences and opinions in an articulate, expressive, and reflective manner (Bernard, 2002). Specifically, I utilized a criterion-based purposeful sampling, which meant that study participants were selected based on the assumption that they possessed knowledge and experience with my phenomenon of interest (Palinkas et al., 2015). In this case, the criteria I selected for were that students were in their third year of medical school. However, I was also mindful of identifying students that represented a range of

characteristic and demographic backgrounds such that I would be challenged to consider this phenomenon from within the lifeworld of a diverse group of students.

I interviewed twelve students in total. I had eight female students and four males. These twelve students represented various racial and ethnic demographic backgrounds as well as a range of undergraduate institutional types. A further breakdown of each participant may be found below.

Participant Descriptions

Robyn. Robyn is a 25-year old White female based in an urban setting for her clinical rotations. She is a third-year medical student and is interested in pursuing a career in women's health. Robyn attended a large, public, in-state institution for her undergraduate work where she received her degree in Biopsychology, Cognition, and Neuroscience. She is originally from a mid-sized, largely suburban, city in the U.S.

Jason. Jason is a 25-year old White male based in an urban setting for his clinical rotations. He is a third-year medical student and is interested in pursuing a career in radiation/oncology. Jason attended a small liberal arts college where he received his undergraduate degree in Biology. He comes from a disadvantaged socioeconomic background and is originally from a large metropolitan city in the U.S.

Jessica. Jessica is a 27-year old Hispanic female based in an urban setting for her clinical rotations. She is a third-year medical student and is interested in pursuing a career in emergency medicine. Jessica attended a large, public, out-of-state institution where she received her undergraduate degree in Neurobiology, Physiology, and Behavior. She comes from a disadvantaged socioeconomic background and is originally from a large metropolitan city.

Nicole. Nicole is a 26-year old White female based in a rural setting for her clinical

rotations. She is a third-year medical student and is undecided as to what field she hopes to practice in. Nicole attended an in-state regional institution where she received her undergraduate degree in both Biomedical Sciences and Exercise Science. She is originally from a small rural town in the U.S.

Rohit. Rohit is a 26-year old Asian Indian male based in an urban setting for his clinical rotations. He is a third-year medical student and is interested in pursuing a career in surgery. Rohit attended a large, public, in-state institution where he received his undergraduate degrees in both Neuroscience and History. He is originally from an urban city in the U.S.

Saya. Saya is a 26-year old Japanese female based in an urban setting for her clinical rotations. She is a third-year medical student and is interested in pursuing a career in internal medicine. Saya attended a large, public, out-of-state institution where she received her undergraduate degree in Biological Sciences. She is originally from a large metropolitan city in the U.S.

Megan. Megan is a 24-year old Caucasian female based in an urban setting for her clinical rotations. She is a third-year medical student and is interested in pursuing a career in pediatrics. Megan attended a large, public, in-state institution where she received her undergraduate degree in Movement Science. She is originally from a mid-sized city in the U.S.

Tyler. Tyler is a 26-year old Caucasian male based in an urban setting for his clinical rotations. He is a third-year medical student and is interested in pursuing a career in internal medicine. Tyler attended a large, public, in-state institution where he received his undergraduate degrees in Biochemistry. He is originally from mid-sized, suburban, city in the U.S.

Cheyenne. Cheyenne is a 25-year old African American female based in an urban setting for her clinical rotations. She is a third-year medical student and is interested in pursuing a career

in surgery. Cheyenne attended a large, public, in-state institution where she received her undergraduate degree in Human Biology. She is originally from an urban city in the U.S.

Rene. Rene is a 31-year old Hispanic male based in an urban setting for his clinical rotations. He is a third-year medical student and is interested in pursuing a career in family medicine. Rene attended a large, public, out-of-state institution where he received his undergraduate degree in Chicana/o Studies. He grew up in Mexico and immigrated to the U.S. when he was young. He comes from a disadvantaged background and is most recently from a metropolitan city in the U.S.

Stephanie. Stephanie is a 25-year old African American female based in a rural setting for her clinical rotations. She is a third-year medical student and is interested in pursuing a career in obstetrics and gynecology. Stephanie attended a large, public, in-state institution where she received her undergraduate degree in Kinesiology. She is originally from a suburban town in the U.S.

Brittany. Brittany is a 28-year old Caucasian female based in an urban setting for her clinical rotations. She is a third-year medical student and is interested in pursuing a career in family medicine. Brittany attended an in-state regional institution where she received her undergraduate degree in Biomedical Sciences. She is originally from a small town in the U.S.

Research Activity 2: Investigating experiences as we live it rather than as we conceptualize it

While the previous section outlines the methods I used to gather data and select participants, there was another methodological step that needed to be undertaken in order to gather a true phenomenological account of this research study. Particularly, that step involved investing the experiences of students as lived versus how I or the research field conceptualized

them. In order to do that, I had to bring to the forefront any biases or pre-suppositions I might have about the phenomenon. These suppositions, assumptions, and existing bodies of scientific knowledge predisposed me to interpret the nature of the phenomenon before even coming to grips with the phenomenological question (van Manen, 1990). This second research activity as a methodological step, then, involved more than just identifying a phenomenon. This involved bringing to light and *testing* my pre-understandings such that I became aware of how these understandings were influencing my framing of the phenomenon and the validity of my findings.

Validity in Phenomenological Research

One of the significant challenges I faced as I began to form my research plan and research questions was what to do with my prior knowledge and presuppositions about emotions in the clinical setting. Specifically, I was particularly sensitive to issues of validity as it related to extracting meaning from data sets according to what the data is saying about the phenomenon versus what I want the data to say about it. In order to demonstrate trustworthy results that demonstrate my investigation of experienced as lived rather than my own conception, I focused on two main validity strategies that encompassed both internal and external validity for this study: bridling and the use of thick description to convey the findings.

External Validity: Thick description

External validity is the validity of applying the conclusions of a scientific student outside the context of that study (Mitchel & Jolley, 2012). In a phenomenological sense, then, external validity has been achieved if the essential description of a phenomenon truly captures the intuited essence (Giorgi, 1988). In order to capture this essence for a reader, I utilized thick description in my write up of the narrative accounts of the students' experiences with emotion in clinical settings. In particular, thick description refers to the description of a phenomenon in sufficient

detail such that one can begin to evaluate the extent to which the conclusions drawn are transferable to other times, settings, situations, and people (Lincoln & Guba, 1985).

For this study, I was intentional about writing up my results in a manor that was oriented with the phenomenological method and the investigation of lived experience. Namely, phenomenological text "succeeds when it lets us see that which shines through, that which tends to hide itself" (Van Manen, 1990, p. 130). Thus, I organized my findings into themes that manifested in and through my data, using the themes to "reawaken the basic experience of the phenomenon" for the reader. These thematic manifestations may be found in Chapter 5 of this study.

Internal Validity: Bridling

One of the most important considerations for producing valid results in phenomenological research relates to the researcher's relationship to the phenomenon under consideration. In particular, how does a researcher deal with their assumptions, beliefs, and pre-understandings as they pertain to the phenomenon of interest?

Within an interpretive phenomenological framework, the task of restraining one's own beliefs about a phenomenon being studied is referred to as *bridling*. This term was first coined by Dahlberg (2006) in direct reference to the way one would harness and bridle a horse. So, just like the ways in which a bridle on a horse restrains its ability to freely move, so to does phenomenological bridling restrain our pre-understandings so as not to understand too quickly or carelessly (Dahlberg, 2006). Specifically, the idea is that rather than putting one's assumptions aside entirely, we can instead "loosen the reins" on our prior understandings to allow for meanings to emerge naturally. Thus, bridling allows for "the restraining of one's pre-understanding in the form of personal beliefs, theories, and other assumptions that otherwise

would mislead the understanding of meaning and thus limit the research options" (Dahlberg & Nystrom, 2008, pp.129 – 130).

However, bridling represents an understanding that not only refers to pre-understanding but understanding as a whole (Dahlberg, 2006). Within the context of phenomenological inquiry, bridling refers to a reflective stance that helps us "slacken" the firm intentional threads that tie us to the world (Merleau-Ponty, 1995; Dahlberg, 2006). This reflective stance, though, is much more than a methodology; it represents an intentional attitude of openness towards the entire research process, from start to finish. This attitude of openness marks a distinct shift from Husserl's notion of bracketing, or setting aside prior knowledge and assumptions, towards a more forward-looking process which allows the phenomenon to present itself (Vagle, 2009). In essence, then, bridling is about an "open and alert attitude of activity waiting for the phenomenon to show up and display itself within the relationship" (Dahlberg & Nystrom, p. 130).

To remain committed to bridling, Vagle (2018) suggests that it is essential to establish a bridling plan. The purpose of a bridling plan, according to Vagle (2018), is to allow a researcher to intentionally reflect on his or her own beliefs and preconceptions throughout the data gathering and analysis phase in order to allow meanings to present themselves. In this case, I utilized my bridling work as both a means to tease out my prior assumptions about the phenomenon, but also to document the authentic ways in which ideas and themes were emerging throughout my research. This documentation was a crucial step in my ability to identify the ways in which themes were manifesting themselves through the eyes of the experiencer.

For my research, there were two methods I used as a part of my bridling plan. The first aspect of the bridling plan was my adoption of a bridled stance towards my approach to the student interviews. Working in medical education, I was keenly aware of the fact that I entered

my relationship with the research with certain preconceptions. However, by adopting a bridled stance and loosening my strands of understanding towards the student's lived experience, I was able to allow their stories to take center stage and adopt a "phenomenological attitude." In practice, this meant that I continually asked students during the interview to describe, for example, what they meant when they used the word “angry” or “frustrated” or “overwhelmed”. So, my line of questioning frequently included the following question: “I think I know what you mean when you say angry, but could you tell me more about what that looks like in the clinical settings?” Within the interviews, then, I had a goal of focusing on "the things in their appearing" (Finlay 2009).

The second part of my bridling plan was the utilization of a handwritten bridling journal to record my reflexive and reflective thoughts throughout my data gathering phase. This journal was initially started to allow me to identify biases that I had towards the research that might cloud my understanding of the phenomenon. However, I found that the most significant benefit came from the notes that I would take both during and after the interviews related to the things that struck me or caused awe. These notes allowed me to move towards identifying the themes that began to emerge between interviews related to my phenomenon of interest.

This was an important step in terms of validity within my research because, as van Manan (1990) suggests, "the problem of phenomenological inquiry is not always that we know too little about the phenomenon we wish to investigate, but that we know too much" (p.46). This "knowing too much" was a concern for me as I entered my analysis process. However, I felt that as I started to utilize my bridling journal to begin to flesh out my pre-understandings, I was able to make intentional movement towards finding what is essential within my phenomenon of interest.

Summary

As previously stated, literature within medical education points to the need for greater engagement with emotions in medical practice. However, there exists a challenge in understanding what it is like for students to experience emotion in clinical settings. Thus, what is needed is a more in-depth exploration of individual stories of medical students, exploring their lived experiences with emotions as they transition into the clinical settings of medical school for the first time. So, the purpose of this research is to conduct a phenomenological study that examines the ways students experience, respond to, and uncover meaning related to their emotions in clinical settings, to better understand the emotional landscape of the lives of medical students through this phenomenon.

CHAPTER FOUR: DATA ANALYSIS AND RESEARCH FINIDNGS

In this chapter I will provide a richer and deeper description of the approach I used to analyze the data as well as a presentation of the raw findings that were used to identify the themes that manifested through my interviews and data set. I would like to make clear here that in Chapter 5 of the dissertation, I provide a more nuanced narrative representation of the research findings. Chapter 5 includes the final research activity, which involves describing the phenomenon through the art of writing. This is a significant aspect of the phenomenological method and is best suited for its own chapter to present the participant's narrative accounts in their full detail.

Specifically, this chapter will be broken up into three main sections. I begin the chapter focusing on research activity three of van Manen's six methodological research activities for pursuing hermeneutic phenomenological research, which relates to maintaining a strong and oriented pedagogical relation to the phenomenon. In practice, this meant that I approached my data analysis as a phenomenologist by staying open to how emotion manifested in and through the lives of medical students. This was an important step for me in terms of intentionally keeping myself grounded to both my fundamental research question as well as the phenomenological method.

I then turn to research activity four, which has to do with considering the parts and the whole of the research. This activity helped me to dig deep into the analysis and coding data sets, while also keeping a broader perspective of what the data was saying as a whole. Finally, I move into research activity five, which deals with reflecting on essential themes which characterize the phenomenon. Here I offer an overview of the ways in which themes manifested themselves within the data, as well an introduction to the themes of pedagogic significance that emerged.

Research Activity 3: Maintaining a strong and oriented pedagogical relation to the phenomenon

This research activity is entirely focused on examining the researcher's relationship with their phenomenon. In laymen's terms, this research activity deals with taking intentional steps to stay rooted to the phenomenological method when beginning to analyze data. Specifically, van Manen (1990, p. 29, 151) talks about the importance of being "oriented" to one's research and writing. What he means by this is that it is not good enough to settle for "wishy-washy speculations" or "preconceived opinions," but rather that we are "researchers oriented to the world in a pedagogic way" (van Manen, 1990, p. 151). In terms of phenomenological data analysis, then, this required that I stay focused on my phenomenon of interest and search for ways in which it manifested through my data sets. I will now turn to an exploration of how I enacted this search within my research process.

Intentionality

One of the most important concepts within phenomenological methodology is that of intentionality. This term was first appropriated for phenomenological work by Husserl (1970) as a way to separate from traditional Cartesian dualities of subject-object relationships into a more holistic understanding of our relationships with the things around us. Specifically, intentionality has to do with the ways in which the act of consciousness and the object of consciousness are *intentionally* related (Moustakas, 1994).

In phenomenological terms, intentionality refers to the inseparable connectedness of the human being to the world (van Manen, 1990). More specifically, intentionality is often looked at the essential feature, or "essence," of consciousness, in that consciousness is always directed to an object that is not itself conscious (Giorgi, 1997).

In terms of research, then, phenomenologists have argued that intentionality is not about the subjective intentions, as in purposes or objectives, of individuals, but the way meanings "come-to-be" in relations (Vagle & Hofsess, 2016). What this means is that researchers need to be looking for those in-between spaces where individuals *find-themselves-intentionally-in* relations with others in the world (Vagle & Hofsess, 2016). Finding the meanings that Sartre (1970) suggests "burst toward" human consciousness becomes the task of the researcher when analyzing phenomenological data.

For my research, it is crucial to underscore the role of intentionality within the context of the overall study. In this case, to be emotional signifies that there is an *intentional* relationship between one's emotion and the situation or person one is emotional about (Giorgi, 1997). As a reminder, what is being examined in this case is the way that phenomena (emotions) present themselves to the consciousness of the experiencer (medical student). Specifically, then, intentionality in this study refers to how emotions present themselves to the awareness of the person experiencing it. In other words, exploring intentionality is what allows us to move closer to the ways in which phenomenon manifest themselves and come into being in the world.

However, unpacking these intentional connections that students had with the world proved to be an arduous task, as it involved searching the in-between spaces of how students talked about and uncovered meaning related to their emotional experiences. These in-between spaces were often subtle and had to do with how students "found themselves oriented to the world" in the clinical setting (van Manen, 1990). The exploration of intentionality within this study, then, started to uncover the meaning structures of this intentional relationship such that I was able to move closer to the "essence" of what it is like for medical students to experience emotion within clinical settings.

What I came to realize in my data analysis, then, was that a significant task of uncovering the themes of my phenomenon was through the unpacking of the threads of intentionality between subject (medical student) and object (emotionality). More specifically, where were students talking about their emotions in terms of being intrinsically related and intentionally connected? Being aware of these intentional connections allowed me to begin to thematize and start to give a meaning structure to the phenomenon.

Research Activity 4: Balancing the research context by considering the parts and the whole

This is the research step where the data shows up and I begin to offer a preliminary set of research findings. Utilizing the framework provided by van Manen (1990), this activity in the data analysis process is a consideration of the data as a whole as well as the individual parts. The goal of this process is to be able to "step back and look at the total, at the contextual givens, and how each of the parts needs to contribute to the total" (van Manen, 2001). The idea here is that parts of the data must be analyzed in relation to the broader context in which they are situated (Vagle, 2010). van Manen (2001) likens this process to what a painter does in the preparation of a canvas for the imagery it is to serve.

During my data analysis process, I employed a whole-parts-whole method which allowed me to think about how the interviews were bringing light to my phenomenon of interest. In this case, I utilized four steps in the data analysis process that allowed me to enact the whole-parts-whole analysis and stay true to my phenomenon of interest. These four steps are borrowed from Vagle's (2010) guidance on how to utilize the whole-parts-whole method to craft high-amplitude phenomenological texts. Specifically, my steps included: 1. (Whole) A holistic listening of the interviews, 2. (Parts) An initial line-by-line reading and transcription of the interviews, 3. (Parts) A second line-by-line reading of the interviews where I coded the data and started to identify

units of meaning, and 4. (Whole) A final more holistic identification of tentative themes that manifested through the text.

(Whole) Listening to the interviews for a sense of the whole

The premise behind listening back to the audio interviews is that it allows a researcher to start to identify what Giorgi (1975, p. 87) calls the "gestalt," or overall shape of the phenomenon. It was during the listening of the interviews that I started to conceptualize a sense of the way emotions were manifesting themselves in the lives of the students I had interviewed. I took notes as I listened to the interviews and started to form some general impressions of the ways emotions were being experienced in clinical settings for students. What this allowed me to do was start to adopt an attitude of openness towards my phenomenon and form an impression of the ways in which the phenomenon was manifesting itself in the lives of the medical students I had interviewed. This was an important step for me in beginning to identify an overall picture of how my research was taking shape. For example, one of the notes that I wrote down during my playback of the interviews was "emotions in the clinical setting are treated a lot like patients…goal is to fix them and send them on their way…at what cost?" Thus, I was starting to see manifestations of this phenomenon and formulate questions that would stay true to the phenomenon during the deeper exploration of the parts. Using the painting analogy referenced above, this step allowed me to get a sense of the final product such that I was clued into the colors, tones, and general feel of the painting during the more technical aspects of the analysis.

(Parts) First Line-by-Line Reading: Transcription

The next step in my process was transcribing my interviews. I utilized an online software called Temi to transcribe my data. This was a useful program for purposes of transcription, as it had a tracking feature built into the software that allowed me to simultaneously listen to the

interview while tracking the accuracy of the transcription. In addition, the program allowed for the ability to take notes and create memos while proofing the text. During this process, I utilized what Vagle (2010) calls a line-by-line reading of the text. The importance of this is process is that it allows a researcher to mark excerpts that appear to contain initial meanings. For me, I found that I utilized notes to begin to ask questions and make statements regarding text that stood out for one reason or another. For example, I noted, "Students are like an emotional sponge…they pick up quickly on emotions of attendings and residents."

This was also a time that I utilized my bridling journal to record my thoughts related to meaning that was beginning to emerge. Thus, at the end of transcribing this interview, I expounded on my thoughts a bit more and wrote, "A big takeaway for me in this interview was how students pick up on their environment very quickly. Depending on who they work with and how they treat students and respond to emotions in that setting determines what students think about that rotation. It can literally change what kind of doctor you are going to be."

(Parts) Second Line-by-Line Reading: Coding

After all the interviews were transcribed, I went through the process of coding each interview. This second line-by-line reading allowed me to accomplish a couple of goals. First, I wanted to get a baseline sense of the types of emotions that students were experiencing as well as how they were responding to said emotions. In addition, I also used the coding process to begin to articulate thoughts and ideas related to the meaning-making going on related to the phenomenon of interest. It is at this stage that Hycner (1985) suggests a researcher begins to delineate *units of meaning*. In other words, beginning to get at the essence of the meaning expressed in a word, sentence, paragraph, or non-verbal communication. These meanings, then, are the building blocks of what will be used to form themes.

In order to sufficiently identify and organize these units of meaning, I coded all of my data using an online program called Dedoose. This program allowed me to apply codes to passages and sections of data, as well as make memo notations throughout the coding process. I chose to use an online software for the coding as I felt it would bring more organization and clarity to my data, given that I had 12 data sets. In addition, this system afforded me the ability to drill down into the parts and analyze the passages that embody the whole. So, as I started to identify the units of meaning that eventually made up the broader themes in my research, I deemed it important to begin with the number of times a specific emotion was stated and how students were responding to these emotions. My coding then shifted to examining the occurrences in which a meaning was prescribed to their emotions and how it was stated (Groenwald, 2004). Simply put, I initially coded my data along three broad lines: 1. Emotions experienced in the clinical setting, 2. Responses to the emotions, and 3. Meaning uncovered related to emotions in the clinical setting.

Emotions experienced in the clinical setting. The purpose of coding the occurrences of the emotions that students were experiencing was to give me an idea of the preponderance of the types of emotions students within my study were experiencing as a whole. While the analysis of the results did not rest in the emotions experienced, it allowed me to start to get a more nuanced picture of what students were feeling in the clinical setting. This line by line reading started to give me a glimpse of what Moustakas (1994) calls the appearance of things. In other words, what does it appear medical students are feeling in clinical settings?

In terms of the emotions that students experienced in the clinical setting, the responses were wide and varied. However, Table 1 outlines the emotions that were most widely reported. What stood out to me is the skew towards emotions that might be perceived as challenging or

difficult. Specifically, the top three emotions that students talked about were feelings of being overwhelmed (27 occurrences), feeling pressure to perform due to being evaluated (22 occurrences), and feelings of incompetence (13 occurrences). In truth, the top eight emotions that occurred across all data sets were emotions typically thought of as more negative emotions. While the mere presence of these emotions does not necessarily mean that students were struggling, it does support earlier research that this transition to the third year elicits emotions that may cause distress in medical students.

To lend narrative voice to the ways that students talked about the emotions they experienced in the clinical setting, I have included brief examples below of what these occurrences looked like in the data. As a reminder, the full phenomenological description of themes and findings will occur in the next chapter:

Being overwhelmed

Brittany, when speaking of an elective experience working in a forensic pathology lab, stated:

> And to be kind of surrounded by that kind of death for a whole month was overwhelming. Emotionally overwhelming. And I think you, I still adjusted to it a little bit, but I was so ready to get out of there…I think it was the most invasive or just exposure that I've had throughout all of medical school.

Nicole also talked about this in terms of her OB/GYN rotation and being with a patient that delivered a baby unexpectedly with her in the room and said, "It was about as overwhelming as I could imagine an experience happening right off the bat." Jason echoed this concept when opening his story by saying "I'd say probably the strongest emotion I've ever had in clinical was um, sometimes when there's multiple factors going on and they kind of pile up and can feel a little overwhelming." Robyn adds to this by saying:

> There's plenty of patients that I see that I get overwhelmed by. But I think that's kind of the big learning lesson of actually being in clinical practice now. And interacting with real patients is that emotional aspect you just don't expect or get any exposure to, even with the simulated patients. It's just new.

Being evaluated/Pressure to perform

Many students spoke of the weight of the fact that they are evaluated on their clinical competency during their third year, as they are trying to learn the ropes of the medical profession. Cheyenne captured the importance of clinical evaluations well by saying:

> So I mean each rotation you're constantly evaluated, whether you know it or not. Everybody, everybody's watching you at all times. A lot. So, the evaluations you will receive at the end of each rotation eventually go into like a final clerkship evaluation which eventually goes into your MSPE, that will go into your residency applications. So as a third year you're really stressed to, to get the best evaluations you can, and work as hard as you can just so it shows in your residency applications.

Rohit, in referring to these evaluations, said, "I mean it's frustrating to, you know, want to say something, but then you don't want to make yourself look bad or get in conflict with these people that are evaluating you." The pressure to perform that accompanied the idea of being evaluated also appeared to be component of the emotions that students experienced. Tyler referenced this by saying:

> Knowing that like one professionalism lapse, like, "oh no, I can't honor that rotation and that's going on my residency application." How many professional lapses and balancing that schedule of third year that you're a full-time worker with different hours each day in different locations that you've never been to. So, it's a lot more than just like the story I started with, I guess I'm saying.

Incompetent

Many students spoke of an underlying emotion of incompetence within the clinical setting. Nicole described this as an "inexperienced incompetence" and went on to suggest that, "there's certain things that you just don't know that you need to know at that point." Jessica

echoed these sentiments by suggesting that, “I just feel like I’m upside down and left foot first and then everything is just backwards.”

Tyler stated that he felt incompetent in front a patient when he had to give a presentation about his findings to a team of medical professionals. He said:

> And then we’re doing rounds in the patient rooms and then he starts putting you on the spot, like about the case or something in front of the patient. So you’re like already nervous. Then you’re put on the spot about something you might not know. And at that point you’re not used to saying, “I don’t know,” um, so you’re saying “I don’t know,” and you look kind of incompetent in front of the patient…That was really tough…I didn’t feel like part of the team at that point, I just felt like some kind of person following along that didn’t know what was going on.

Tying back to my original research question, I found it interesting that many of the emotions that students discussed were impacted by the environment and setting of the third year. Namely, emotions such as "pressure to perform," feeling "compared to others," and "low in status" are very context specific and appear to be activated in the clinical setting. Thus, this initial step in coding did clue me in to particular attributes of this phenomenon that later informed my identification of themes. Namely that the clinical setting seems to act as an activator switch, if you will, for emotions that may be causing distress in medical students.

However, the fact that students were having emotions was only part of the equation. I was also interested in how students were responding to these emotions, and how the clinical setting perhaps impacted or dictated these responses. I will now turn to an exploration of the responses that students had to their emotions in the next section.

Table 1:

Emotions experienced in the clinical setting

Emotions Experienced	Occurrences
Overwhelmed	27

Table 1 (cont'd):

Being evaluated/Pressure to perform	22
Incompetent	13
Feeling sad/down	12
Frustration	12
Feeling compared to others/Competition	11
Low in status	11
Inadequate	9
Uncomfortable	9
Empathy	8
Feeling bad	8
Excitement	8

Responses to emotions experienced in the clinical setting. As I shifted into the coding of the responses that students were having to the emotions experienced in the third year, I began to see some interesting trends emerging (Table 2). One of the most common responses that students had to their difficult emotions was to hold their emotions in, or not express them. This response came up in nearly every interview I had with students (i.e., 9 of 12) and became a pivot point in the interviews to begin talking about the nature of experiencing emotions within the clinical setting for students. In fact, the response of or related to holding in emotions came up close to 50 times in total including the various other ways that students expressed this sentiment (i.e., Keeping a front, processing later, shutting down). Megan talked up her presumed need to hold her emotions in by saying:

> I would feel those things and I would like feel them, but I just wouldn't want to react to them. Or, I would tell somebody, you know, I would tell the patient like, "Wow, you know, I'm so sorry, like this is really hard."

> So, I would respond in some way, but like if I wanted to cry or like have some reaction, I would wait until I wasn't there anymore.

When pressed on why she felt that was an inappropriate place to display emotions, Megan stated:

> You're really not supposed to be feeling like that or reacting to things. Like it's much more like you're going through the mill, you're doing your work, you're working, and you're not supposed to be like feeling a lot or responding to things like that.

Numerous other students echoed these sentiments as well. Robyn stated that, "Often times within the medical profession, especially, you're told to be empathetic absolutely, but also to be able to show strength and kind of be someone who isn't experiencing the same types of emotions as your patient." Cheyenne expressed similar sentiments when she said, "And the fact that I sucked it up, you know, maybe that's just going to be my entire future because I know that if I suck it up, I'll get to do stuff later." Tyler added to this idea by saying:

> A lot of times you don't want to show too much emotion, okay. Third year you don't want the attention to really be on you or like kind of take way from the conversation. You're being one way or another and you kind of want to hold on to those stronger emotions.

Thus, this became the first connection that I began to make between data sources as I started to search for inherent meaning within the statements that students used to describe their responses to emotion. I grappled with questions, here, in my bridling journal related to my phenomenon of interest. I wrote, "The responses that students are having reveal something about this phenomenon. What is it? I believe that there is something about the clinical setting that is restricting the ability of medical students to feel and process emotions at the time they are occurring. What might that be? I will need to look for how students are making meaning related to their emotions to figure that out."

Clearly, at this stage I recognized that something interesting was occurring in the clinical setting related to student's experiences with emotion. Namely, that students were experiencing powerful and challenging emotions and, by and large, suppressing any sort of response to these emotions within that setting. However, these data points only portray a small amount of the overall picture. Like the painter zooming in to focus on a little detail of the painting, I needed to step back to see how these stories informed the identification and manifestation of themes. Thus, during the next line by line reading, I was looking for meaning making and beginning to identify salient themes.

Table 2:

Responses to emotions in the clinical setting

Responses to Emotions	Occurrences
Holding it in/Not free to express	24
Utilizing other students to vent/process	12
Competition/Comparison	11
Shutting down/traumatized	10
Crying	9
Being open about feelings/sharing with others	9
Keeping a front/not appearing weak	9
Loss of confidence/difficulty in rotation	9
Burnout/Cynicism	8
Staying positive	7
Settled in/comfortable over time	6

Table 2 (cont'd):

Learning balance/adaptability	6
Processing at later time	5

Uncovering meaning of emotions experienced in the clinical setting. The last line by line reading was focused on highlighting and coding lines and paragraphs that explicated meaning within the data sets. It was this stage of my coding that my phenomenon of interest started to come into greater focus and I began to identify salient themes across data sets. Here I was coding the data in terms of the ways in which students talked about what their experiences with emotion in the clinical setting meant to them. This data may be found in Table 3.

One of the salient ways in which the students interviewed uncovered meaning regarding their emotions was through patient encounters. In many instances, students talked about how strong emotional experiences reminded them of the "realness" of medicine and the humanity of their patients. For example, perhaps seeing a patient receive bad news for the first time or experience a negative outcome. Thus, as students were making meaning based on the stories they told, it was not uncommon for them to talk about meaning being revealed to them through the patient encounter in which their story was centered. For example, Robyn talked about being with a patient who had recently received bad news and emphasized that, "definitely there was a huge impact and I would hope it helps with the growth of my interaction with patients…sometimes it's just easy to take the personal nature out of medicine." Another student, Megan, empathized deeply with a patient she connected with and stated, "I was like, 'I don't know what you would have wished for your life to be like, but I just wish you could have that and there's no reason why you couldn't have been me standing here and I couldn't have been you.'" In many cases, it was

almost as if the students felt more of a kinship with the patients than the physician in the clinical setting, with many talking about an overall strong connection to patients and patient care.

While I will continue to unpack this uncovering meaning element in greater detail in Chapter 5, the picture related to this phenomenon began to become a little clearer as I coded this data. Specifically, I began to start to see themes emerging in the data as I began to dig down into how meaning was revealed to students regarding their emotions. Like taking another step back from the painting, this stage of coding the meaning-making process eventually led me back to the whole data set for an intentional move towards theme identification.

Table 3:

Uncovering meaning related to emotions in the clinical setting

Meaning Making	Occurrences
More about patient's feelings than your own	12
Felt an overall lack of fairness	9
Led to a more meaningful connection with patient	7
Unsure of role in clinical setting	7
Accepting Reality of Medicine	6
Made decisions on specialty choice	6
Setting impacts response to emotions	5
Social intelligence is important	5
Sucking it up will allow me to be perceived as strong	5
Trying to find fit in medicine	5

Table 3 (cont'd):

Self-care is important	5
Confusion about what to feel	5

(Whole) Identification of themes

The last step in my whole-parts-whole data analysis was to read over each participant's data set to conduct a thematic analysis. While the previous coding work helped to shed light on emerging themes, this type of analysis in phenomenology is not based on the frequency of specific codes within data sets. Rather, theme analysis refers "to the process of recovering themes that are embodied and dramatized in the evolving meaning and imagery of the work" (van Manen, 1990, p. 78). Thus, I will now turn to the next research activity utilizing van Manen's methodology, which involves reflecting on the themes that characterize the phenomenon.

Research Activity 5: Reflecting on the essential themes which characterize the phenomenon

This particular research activity, as van Manen (1990, p. 77) states, is attempting to "try to grasp the essential meaning of something." So, this research activity involves spending time with the data in order to identify the ways in which the phenomenon is emerging. Often times, themes are not found in the words of the description, but more between the lines (Barritt et al., 1984).

Identifying these "between the lines" spaces is not an easy task and can certainly be oversimplified by organizing broadly coded categories into themes. Instead, this is where the artist must pull out the proverbial paintbrush and begin to paint the canvas. For me, this artistic liberty was a welcomed part of my data analysis, but also involved earnest and deliberate

thinking. In fact, I found I did some of my best thinking when I stepped away from the canvas and went on what Vagle calls "phenomenological runs" (2014). These were specific times that I would go on a run to help emotional, mentally, and physically detach from the research findings, and be more open to the ways in which the phenomenon was manifesting itself over time. This was a beneficial practice for me and a key to staying in the phenomenological attitude as I was reflecting on themes.

However, this process was also quite tricky as there is no roadmap to identifying and cultivating themes. Further, since I am approaching this from an interpretivist framework, I also wanted to be mindful of how my own understandings were influencing my identification of themes. Thus, I frequently found myself "stuck" in terms of how to articulate the multitude of themes I saw bursting forth within the data set. Moreover, I was uncertain of how to portray these themes phenomenologically such that I would do justice to the multiple ways in which students talked about their experiences with emotion.

It was during this process of working in and through this “stuck-ness” that I realized that my own understanding of the ways in which I am making meaning of the data is something I needed to be explicit about, such that I had an anchoring point that I could return to this as I began to write about themes that appeared to be emerging. Within qualitative research, this concept is called *reflexivity* and allows researchers to ponder the ways in which who they are may both assist and hinder the process of co-constructing meaning (Leitz et al., 2006).

One strategy that really helped move me in my own reflexivity was crafting what Vagle (2014) calls a post-reflexion journal. It was a process that, as Vagle (2014) suggests, I could write about what frames my seeing of my phenomenon, and how these frames inform my theme identification. This process allowed me to reflect on the aspects of my identity that I lay claim to

that might influence that way I see and experience the data set. This research activity, then, allowed me to reflect on how my acts of meaning-making were being shaped by my background and environment, and how this might be framing that way I am approaching the data thinking about the emerging themes.

Identifying Essential Themes

With that in mind, I will now transition into identifying the themes that emerged within this phenomenological study. I will use Chapter 5 to more eloquently write about these themes and shift into the last research activity, but I wanted to introduce the themes of pedagogic significance here and highlight the ways in which I went about identifying the emergent themes within my research.

While there is not one specific agreed upon way to identify themes within phenomenological research, there are indeed approaches that are more in-line with this philosophical method than others. For starters, as van Manen (1990, p. 122) suggests, if a description is phenomenological powerful, then it allows us to "see" the deeper significance, or meaning structures, of the lived experience it describes. This type of powerful description frequently occurs through the identification of those statements which start to make visible these meaning structures and capture the essential nature of the phenomenon. These statements are most often organized into what van Manen (1990, p. 106) calls "essential themes." In other words, those themes that, if taken away, the phenomenon would not be the same.

I went about the process of identifying these essential themes by utilizing a thematic analysis. Specifically, I attended to the text and thought about the parts that capture the fundamental meaning or central significance of the text as a whole (van Manen, 1990). Once I identified and isolated these thematic statements, I asked myself, "what is it about these phrases

that seem to be thematic of the experience of emotion in the clinical setting?" This allowed me to identify three themes of pedagogical significance shown in Table 4: (1) Emotions as a pop-up storm; (2) Emotions as situated; and (3) Emotions as a state of becoming.

Table 4:

Themes of pedagogic significance

Themes	Thematic Manifestations
Emotions as a Pop-Up Storm	1. Being unprepared for the storm 2. Seeking refuge from the storm 3. Navigating difficult waters
Emotions as a State of Becoming	1. Metamorphosis of identity 2. Taking flight 3. Migration to residency
Emotions as Situated	1. Emotions as learned 2. Emotions as interconnected

Summary

In this chapter, I began with an overview of the ways in which I intentionally remained oriented to my phenomenon through active bridling throughout the data analysis process. I then discussed the qualitative methods used for phenomenological data analysis, including the whole-parts-whole analysis process I used to identify thematic manifestations of the phenomenon of medical student emotionality in the clinic setting. Lastly, I explained how I reflected on and identified the essential themes which characterize the phenomenon. In the next chapter, I describe the outcomes of the data analysis by unpacking these three essential themes in greater detail along with the way they manifested themselves in the lifeworld. Each theme includes a rich narrative accounts from the lives of students in order to bring forth and give meaning to this phenomenon as it was experienced.

CHAPTER 5: NARRATIVE REPRESENATION OF THE RESEARCH FINDINGS

In this chapter, I will be presenting the research findings in narrative form. As stated in the previous chapter, many forms of data analysis were performed on the data to discern themes that began to emerge. By examining the data in its parts and narrative whole, I was able to identify lived-experience descriptions that will be described in this chapter. More specifically, though, I will be attempting to explain the meanings and essences of the experience of emotion in the clinical setting through a textural-structural description of the themes that emerged (Moustakas, 1994). This process involves the last research activity in the van Manen methodology I used to structure this paper.

Research Activity 6: Describing the phenomenon through the art of writing and rewriting

As van Manen (1990, p. 131) suggests, "the process of writing and rewriting is more reminiscent of the artistic activity of creating an art object that has to be approached again and again…going back and forth between the parts and the whole in order to arrive at a finely crafted piece that often reflects the personal "signature" of the author." As I shifted into this final process of writing about the phenomenon, I found this statement to be entirely accurate. Like a painter working out a scene on canvas, my choice of perspective, colors, textures, and design all played an important role in being able to give credence to the phenomenon I was attempting to describe. In this sense, it was only as I began to put the brush to the canvas, so to speak, and started writing about the phenomenon did the overall picture start to come to life.

In this way, the goal of my phenomenological writing was to make visible that which is invisible. This was accomplished in my research by identifying statements within the transcribed interviews that capture the essential nature of the phenomenon. I then attempt to describe how things are present for the experiencer by "working the text" and illustrating the structures of

experiences that captured the phenomenon (van Manen, 1990). Once these structures of experience were identified, I then organized them into themes and "wrote the experience" (Henrikson & Savei, 2009).

The goal of this chapter, then, is to provide a narrative representation of these themes. I choose to utilize a narrative approach to display the findings, as it seemed the pedagogically sound way to authentically portray the ways in which this phenomenon was manifesting itself in the life-world. In Chapter 6 I will shift into a description of the insights, meanings, and implications for the research findings described within this chapter.

Revisiting the Purpose of the Study

This qualitative study utilized an interpretive phenomenological study of how medical students experience, respond to, and uncover meaning related to their emotions in medical school. Specifically, I explored the lived experiences of twelve medical students who were engaged in the clinical clerkships of their third year of medical school. Each student was interviewed to gain a deeper understanding of how emotions manifest and what this experience was like. From here, I utilized a whole-parts-whole analysis to identify themes as well as *manifestations* of these themes (Vagle, 2014). Manifestations are the ways in which the phenomenon "comes into being" through intentional relations, which are always being interpreted (Vagle, 2014). This concept is Heideggerian in nature, meaning that the manifestations that I identified represent an interpretive act of capturing the ways in which the phenomenon appeared to me.

Research findings are organized by themes with a textual introduction to each theme followed by direct excerpts and quotes that I use to present a narrative representation of the manifestations of each of these themes. This way the participants can be said to have a presence

or voice in the final write-up that I produce (Smith & Osborn, 2004). To preserve this voice, there were many times that length was retained in the exceprts to contextualize how the themes were manifesting themselves in students' lives. For clarity, the verbatim excerpts from the research participants are set apart in single-spaced, block text. In other cases, I used direct quotes and added interpretive language to weave together the thematic manifestations with the experience descriptions.

As mentioned in chapter 4, three themes emerged through my whole-parts-whole thematic analysis, which were: (1) Students often experience *emotions as a pop-up storm* in that they are occurring quickly and unexpectedly, leaving them feeling vulnerable and exposed. (2) Emotions were not always temporal for students but were often experienced in a forward-looking *state of becoming* for students; (3) There is a *situated* aspect to students' emotions, suggesting that there is a certain amount of emotional boundedness that occurs within the clinical setting. These three themes, including the thematic manifestations, will be further unpacked and explored in the remainder of this chapter.

Thematic Representation of the Research Findings

Theme #1: Emotions as a Pop-Up Storm

Not long ago, my wife and I partook in what we envisioned to be a relaxing four-hour canoe trip down a river in Michigan. About halfway through the trip, we heard the first thunderous sign of what was headed our way. A mix of both surprise and fear started to creep in as we turned to see the leading edge of a small, but mighty, storm system heading our way. Thinking we could maybe out-paddle our impending fate, we picked up our pace - hopeful that we might be able to seek shelter at a riverside park.

We had no such luck. A brief five minutes and a single crack of thunder later, the skies

unleashed what we were later told was a "pop-up" storm, filled with wind, lightning, and damaging hail. Unfortunately, our only recourse was to paddle to a muddy, and highly sloped, wooded shore area. We attempted to take refuge as best we could, but we were cold, scared, and uncertain of what to do next. Our lack of preparation for such an event had left us vulnerable and at the mercy of mother nature. We hugged the shoreline for another ten minutes as the storm let up in ferocity, loaded back in our canoe, and paddled the rest of the way to our destination feeling lucky that that storm was quick, but also quite traumatized by what had just occurred.

In truth, this experience rattled us, and we felt both angry and ashamed that we left ourselves so exposed on the river. At the same time, we had no idea this was coming. We felt blindsided and vowed that no matter what the weather, all future trips will include a storm contingency plan, or at the very least warm clothing in case weather changes quickly.

In many ways, the experiences that medical students talked about in their clinical years of medical school were a lot like this pop-up storm that we encountered. Unexpected, unplanned, and leaving them feeling very vulnerable and exposed. Thus, the first manifestation of this theme that I will examine as it relates to emotions in the clinical setting is that of being unprepared for the storm.

Thematic Manifestation: Being Unprepared for the Storm. Nicole opened her lived experience description with a story about a time she was on the labor and delivery floor attending to a patient in active labor who happened also to be a non-native English speaker. While working alongside a resident to try to help comfort and understand the patient, she "all of a sudden she gave one big push and the baby delivered in the bed, like in the blink of an eye." Nicole then explained how she had to run to find a nurse as well as the attending physician, and described the entire experience as very "overwhelming":

> One of the things that you kind of take most for granted is like being able to communicate with your patient and explain what's going on and kind of guide them through this process and just thinking like how terrifying that must have been as the patient to not only be in excruciating pain because you're about to have a baby, but not to be able to like speak with anyone to have by the time that she delivered the baby, like five random people running into her room while she's like very exposed. I just found myself like overwhelmed, like how medicine had failed her in that experience and how I was not at all prepared to be able to help her in that, in that time.

Nicole's description of her experience of being overwhelmed in the clinical setting was noteworthy because it had less to do with the experience with the patient and more to do with her perceived lack of preparation. When pressed to expand on her feelings of being overwhelmed she went on to say:

> So I think in general, like for medical students, we're used to being on top of things. You go through undergrad, and you get good grades because you wanted to go to med school and you're used to like having things handled. …Like med school, you know, the first couple of years you have to be pretty organized to kind of get through things and so you get used to having a sense of control over, um, certain things in your life and being able to kind of feel like you can kind of help guide, um, how your day's going or like where your life is going. For one of the first times, granted board exams and things were pretty good way to get some exposure to being overwhelmed as well, but you're placed in a situation where you don't have all of the control and you don't have the knowledge or some of the tools necessary to be able to kind of help feel like you're helpful in the process or at least that you're not in the way in the process too. And so it's this unique feeling of um, wanting to be helpful, feeling like you have some of the knowledge to be helpful but not knowing how to apply it and also how not to get in the way of people who are taking care of the patient.

So, for Nicole, it was less about the fact that a tense situation was playing out in front of her, and more about the fact that she felt like she didn't have the tools to offer anything of value to the situation. Along these lines, she noted that she felt like in the third year there is a mismatch between "your fund of knowledge and your ability to apply that in a useful way." As a result, she felt both inexperienced and incompetent because "there's certain things that you just don't know you need to know at that point."

This theme of feeling unprepared was echoed by other students as well. Robyn was describing an awkward encounter with a patient in which she walked in the room right after the patient had been delivered some tough news regarding a cancer diagnosis. When describing the encounter, she said:

> It just gave me really conflicting feelings because as a medical student, you know, you don't really know what's going on medically yet, at least in that point in my training I didn't, umm, and I didn't know how to cope with it, and I didn't have anything to offer him, so I just sat there and cried with him. Umm…and so that was definitely a situation where I felt completely overwhelmed.

Interestingly, though, when I asked her to describe what she meant by overwhelmed in that setting, she talked about not having a framework in which to put this experience. Specifically:

> I think there were different aspects of feeling overwhelmed that I just had never dealt with before. So up until that point in my training, it was all textbook. So everything I was studying about clinical diagnoses and what patients go through was out of either lectures or, you know, hearing about it from different scenarios but you're never actually interacting with the patient who is going through it. Umm, so I think in that way it was overwhelming because I had never had the emotional context associated with it when delivering a diagnosis. So I never had a patient saying "oh I just found out I have recurrent cancer" and then had to speak with them about how that made them feel.

So, very much like being caught in a storm without proper gear, the vulnerability comes from one's own perceived incompetency more so than the situation itself. In other words, students' inability to appropriately respond to storms causes intense emotions to surface, which often manifests as feelings of being overwhelmed in the clinical setting.

Jason also had his own pop-up storm moment when, after going to check on a patient during an internal medicine rotation, he was confronted about whether he looked at the patient's labs in their medical chart. In a poignant moment within the interview he admitted:

> And I said, no, because I was kind of rushing to get the information because I knew they were coming after me, it didn't really occur to me to look at the labs. And then they say, “okay, well why don't you look.” Um, and I'm really feeling inadequate and kind of stupid at this point. Um, and I look and it's um, you know, it's every sign of multiple myeloma. And that's like in that moment, that was like the one thing that I should get right. I've done five years of research on multiple myeloma. My grandma has multiple myeloma, like I'm trying to go into oncology. So it, it felt so like… All of a sudden I just felt so dumb for missing it even though it was just, it had nothing to do with missing, it had to do with not looking at the computer.
> Um, but I just felt so overwhelmed and that on top of seeing the multiple myeloma patient and the emotions associated with my grandma and just like thinking about that, I just kind of broke down. Um, and I literally just left the clinic.

As evidenced by Jason's story, there is this element of extreme self-shaming that can occur for students in these situations where they feel that others perceive them as unprepared or incompetent. He also talks about the suddenness of his emotions, in that his emotions came on strong and overwhelmed him to the point that he had to leave the clinic. It was as if his experience of emotion after seeing the labs hit him like the ominous first crack of thunder from an approaching storm, knowing the downpour was about to start.

This element of emotions being sudden and unexpected seemed to be a common theme for students, with Stephanie also referring to this when talking about a patient who made a huge leap in progress after a stroke. She said that the patient had previously been unable to speak or move the left side of her body for two weeks after her stroke. Stephanie then relayed the following story:

> So I didn't get to see her for a couple of days, and I came in on Monday and was like, you know, I'm so sorry like I didn't get to check in on you every day. I'm like, how are things going? And she looked at me and was like, "I'm good." And she hadn't been able to say anything in so many...And I instantly started crying! And I, it surprised me, you know, that emotion that I had gotten and I was like, this is so exciting to see someone that just, you know, when you meet those people that are just so genuine and you're like, it seems like you've done everything right in your

> life, you know, never smoked, never drank, you know, eats healthily. And it was just so amazing to see. And I was kind of shocked myself, you know, I apologized. I was like, I did not expect to cry! I was like, I'm just so excited for you. Like it's just really exciting to see, um, you know, the advancements that she had made. And it was, it was awesome.

Clearly, for Stephanie this experience was powerful, but what struck me was how specific she was about the way in which the emotions manifested. She used the words "instantly," "surprised," and "shocked" all to describe this emotional experience with the patient. There is a time factor to experiencing this phenomenon, in that students appear to frequently be caught off guard regarding the suddenness of their emotions. In this way, it seems that to experience emotion in the clinical setting as a third-year student is often like being caught in a pop-up storm.

Not surprisingly, students did not always appreciate or value the suddenness of their emotions, as they often perceived that they should be a "pillar of strength" when strong feelings started to emerge. Specifically, Robyn noted:

> A lot of the environment in the hospital is that you shouldn't really show emotion with your patients. Not necessarily there should be a wall up and you shouldn't show any sort of empathy or emotional attachment to your patients, but more so to be, you know, a pillar of strength for them. I think the expectation is that you need to be their sense of strength when they don't have any, and you need to make it seem like there is hope even if there is none.

This juxtaposition between these sudden emotional storms and students desire to remain strong and, in essence, "stay dry" frequently caused angst, and left students looking for ways to avoid getting wet in the storm. Thus, I will now turn to the next manifestation of this theme, which deals with student's experience of emotion being like trying to seek refuge from a storm.

Thematic Manifestation: Seeking refuge from the storm. There is an adage in the first two years of medical school, as students are attempting to consume and process large amounts of

information, that these years are like "trying to drink water from a fire hose." In other words, students are being fed so much information at such a high rate that they have to try to drink what they can because more is on its way.

In a similar vein, the clinical years of medical school are like "trying to stay dry in the rainstorm" in that students are often in downpour kind of situations where they have to try to keep dry any way they can and wait for the storm to pass.

What is interesting about the stories that the medical students told was the lengths at which they went to avoid showing the emotion that they were experiencing in the clinical settings. It was rare for a student to say that they would express emotion in the clinical setting, with many suggesting that this was neither the place nor time to show these emotions. What seemed to be occurring, then, was that students were often trying to suppress emotions in highly volatile situations where a figurative storm had just swept through. For example, as alluded to in Jason's example above, he talked about feeling both "inadequate" and "stupid" for missing a diagnosis that he had a connection with personally. His experience of emotion was very much like a storm, with sudden, unexpected, and strong emotions being elicited. However, rather than show his emotions, he stated that he left clinical and "walked out of the hospital into um, like through the cafeteria to like the back area of the children's hospital. And I was like crying for like an hour." When I asked about why he felt he had to leave the clinical space to cry, he said:

> I didn't leave because I needed to. I left because I was ashamed because I knew I was about to cry in front of all the, all these doctors.

So, for Jason, there was undoubtedly an element of wanting to save face. Of not wanting to appear to get wet from the inevitable storms that happen in the clinical setting. And, without the proper gear to keep from getting wet, he sought to remove himself entirely. Just like my wife

and I on our canoe trip, Jason needed to go to shore to hang on to something and find refuge from the storm.

Others, too, expressed the need to escape an emotional pop-up storm. Brittany talked about being on a Forensic Pathology elective and having a severely decomposed body come into the medical examiner's office. She explained the situation as follows:

> I only walked out once, which is shocking to me because I wanted to many more times, but it was one that they had found in a hotel on Plainfield, like, uh, you know, a rent a room by the week kind of place and he was found like in this room, in the bed naked, surrounded by trash, just trash everywhere because they had pictures of it. It was the most; it was like watching CSI. I mean, it was awful. Beer cans, drug paraphernalia, just anything you can imagine. Just filled the room and he'd been dead for like two weeks and he was decomposing to the point that his skin was just melting off and they brought him in and he's in this bag and this was our third body of the day and they open the bag and a fly flew out... and I almost lost it. But I just, myself and the TY year we just stepped to the very back and basically, like I didn't look at it, I couldn't. And then the wave of smell came out. And that was, that was by far the worst smell of the month. And then um, they opened the bag, like they totally removed the bag and they were doing their, like external exam and a second fly flew out and I vomited in, my mask, and ran out and as soon as I ran out, all the other students followed me and we decided we were done.

Indeed, there was an element of extreme physical aversion in this story, but Brittany went on to say that this experience caused such strong emotions that she hoped to never return to this setting. Specifically, she talked about how each morning the staff would let her know if they had bodies that needed to be examined that particular day and said:

> And if they texted and said, yes, we have some, I would resist every urge in me not to respond and say, "I'm not feeling well, I won't be there." Everyday. Every single day for a month. And if they said we have no bodies, it was like Christmas morning every single time, and it wasn't just because I didn't want to work just because I just don't know. I guess I just maybe didn't feel ready for the ups and downs that day, you know?

It was as if Brittany knew that storms were coming, and she would rather stay inside than venture out in the rain. She supported this manifestation of this phenomenon by saying her experience in this rotation was like:

> Horror. It's a sadness that's associated with horror. Like, this is what nightmares are made of. This is people who like watching creepy, gory movies like this is, this is what they're made of. And you keep putting yourself right back in that same situation where you know you're uncomfortable.

However, while both Jason and Brittany talked about removing themselves from the situation to experience their emotions, many students felt as though they had nowhere to go. Instead of being able to leave, they had to figure out a way to seek refuge, so to speak, within the setting itself. Thus, many sought refuge by suppressing emotion and going within themselves. For example, Jessica discussed a time in which she had to break bad news to a patient's family after the patient passed away in the clinical setting. She went with the resident to observe this process and relayed the interaction as follows:

> And so like it made me very emotional to hear her father console her, and he's, he's old. I have a thing for old people. He's old, and so it made me really sad and so right away I got really teary-eyed, and really choked up and I looked to the resident, and he was like stone-faced. So it's like, I don't know how else to describe it. I sucked it all in. Like, I just sucked everything back in and I was like, don't, don't. And I, and I didn't, but my initial gut reaction was to cry.

In this case, Jessica described her experience with emotion as "sucking it all back in," which seems to indicate that she was sheltering in place, so to speak, regarding the emotions she was feeling. Rather than crying, she felt as though the more appropriate response was to skirt her emotions by suppressing them.

Similarly, Rene talks about having a great deal of anger and rage during a pediatrics rotation when a child was brought in that had been intentionally burned on a hot bathtub by her parents. The father lied about how the burns happened, and Rene stated:

> But the thing is that the burns were not on the scalp, we're not in the chest, they were a very localized just to face and the back and they did not seem like splash burns, they were very circumscribed. So, um, you can delineate exactly where those burns happened. So, you know, this guy is telling me this story and with the limited training that I have, you know, I'm like, this story doesn't seem to add up, you know, he said he poured the water on the child's scalp, and I mean, based on the severity and location of the burns, this, this does not seem like it was an accident.
>
> So here I am thinking, oh, so you're lying to me in my face telling me that this was an accident when your story doesn't match the site of injuries and the severity to which you're claiming, you know, it happened. And, uh, so as a father, I have a three-year-old daughter. So as a father in my head, I'm going like, who could, who could possibly hurt an innocent child?
> It enraged me. It made me so angry. I, I, I, I had to like dig deep to not speak out of line or say anything to this man because, you know, as a dad, like I do everything to protect my child against anyone and everyone you know.

So, many of these experiences with emotions in the clinical setting would be like the "seek shelter" kinds of storms that often sweep through and strike hard and fast. However, like our canoe trip I referenced earlier, these students had nowhere to go. They had to hang and hug the shore while the storm blows over, often with little to no resources to protect themselves. In Rene's case, he experienced just about the worst thing that one could see in a clinical setting, and instead of expressing outrage, he instead he felt he had to be what he described as "objective" and said, "So I felt angry, sad, and I had to somehow keep a straight face and be objective in regards to my views of what this child had experienced." When pressed on how he would do this in such a difficult situation he said:

> The metaphor that my therapist used was just put it [the emotion] in a little box, store it, you know, close the door and then walk away so that you can keep moving. And then when you have time, go back, open that door, take the box out and take out whatever was there so that you can break it down and not just store those emotions and let them build up in the future.

While this concept of medical students suppressing emotion is not necessarily new, what was quite interesting from my interviews with students was the degree to they felt blindsided by

the emotionally challenging experiences of the third year, and how unprepared they were to handle them. My research seemed to indicate that is was not that students were becoming overwhelmed and stressed as a result of numerous low-level emotional experiences during the day. Instead, it was usually these pop-up storm type experiences that came out of nowhere and packed a big punch.

In turn, the manifestation of student's experience with emotions as something that needed to be escaped or suppressed came up enough that it appeared that students were frequently in situations where they were trying to keep dry any way they could and wait for the downpour to pass. Thus, it seemed that for many students their experience with emotion in the clinical setting was like trying to seek refuge from a storm. However, there was a third way that this theme manifested, and that was the through the idea of students seeing their emotions as something that needed to be navigated through in order to keep moving forward. This leads to the final thematic manifestation of this theme, which is emotions as the navigation of difficult waters.

Thematic Manifestation: Navigating Difficult Waters. When medical students experience these strong storms of emotion, one of the things they talked about was figuring out how to continue to move forward. This is not always easy to do when the water gets churned up, and the path forward seems unclear or dangerous. Students want to stay the course, but to do so often requires some recalibration of the navigational tools that have served them well in the past. Thus, one of the ways that the experience of emotion in the third year of medical school manifested itself thematically was through the idea of navigating difficult waters.

Rohit captured this theme of navigating difficult water well when he described his experience of being relegated to the end of a patient's bed during a surgical procedure in which he was involved:

> It was like, it was frustration. It was like kind of like overwhelming frustration of I'm in this position, I don't really know how to get out of this position, so it was kind of like, like I was just stuck. I didn't really know where to go and like what, what I could do to sort of help myself in that situation and I, it was almost like kind of like a hopelessness too because I didn't really know if something was going to change.

For Rohit, his experience of emotions in his third year manifested as a feeling of being lost or helpless as far as what to do next. As he searched for direction, he started to question his role within the clinical setting. In particular, he noted:

> I'm sort of pushed aside, but then I'm just standing there not saying anything not being talked to that I'm wondering like what am I gaining from this situation? Like what is my role in this situation?
>
> That's where the frustration comes from is that like it's, I like I want to be there, but I want an active role and want to be taught what's going on and not just pushed aside. You know, instead I could be reading or something or studying something else in that situation, but I'm like actively trying to be there and be engaged because I know, like I need to be taught here because it's a field that I want to go in to. And so right now planning for, you know, sub-internships and so those are like high-level experiences where I'm expected to know a little more than a third-year medical student. And so now I'm like nervous going into those like, will I be ready for those? Because I feel like I'm not getting the training and education in the operating room that would prepare me to get those experiences. And so it's kind of, it's really stressful to think about where I'm going to be, you know, in a few months having to basically compete with other people in the same, same shoes as me, that may have had better operating room experience. More supportive, um, teachers. Yeah.

This example from Rohit points to the more deeply seeded manifestations of student's emotions, which deals with their ability to try to find direction within the storm. In other words, once an emotional experience occurs, how are students making sense of these experiences? Often, it seemed that after the pop-up storm would pass, students were left to their own devices to figure out what to do next. This navigational challenge frequently meant that students were left without a "true north" to orient their boats, and instead left floundering emotionally. Jessica

touched on this navigational difficulty in going back to her experience of breaking bad news to a patient's family for the first time:

> I mean I didn't say anything the entire time because it's not my place. I'm a medical student. I'm learning, but I was like, okay, just sit here. So I sat there with tears in my eyes, but I didn't let anything fall and then I kind of left, so I don't, I genuinely don't know. I don't know if you can or can't or should or shouldn't. I don't know.

Many students, it appeared, struggled in terms of trying to learn the clinical feeling rules of medicine for the first time. Robyn used the word "jumbled" to describe her attempt to try and integrate her emotions with the work she had to accomplish on a daily basis. It was almost as if when the storms of strong emotions manifested, it threw off student's traditional navigational aids that had worked in the past, leaving them searching for new tools to help find their way. She said:

> Yeah and just the interplay I guess of the emotions kind of intertwining with medical information. Cause everything…you know you think about doing your future job and integrating all the information that you're learning and studying and I just…the emotions kind of jumble it I guess. It's just figuring out how to incorporate that into your daily work and not get either distracted or, you know, mess everything up.

One of the things that became clear in exploring the phenomenon of medical students' experiences with emotion in the clinical year is that emotions are very much an *embodied* phenomenon for students. What I mean by this is that there is form given to student's emotions through the ways in which they are felt and experienced within the body. This ties back in to the 'Emotions as Inherent' perspective and the early work done by William James (1890) examining emotions as embodiments in that bodily activity occurs in response to an emotional stimulus (Niedenthal et al., 2005). So, for example, when Jason stated that he "broke down…and literally left the clinic", his bodily reaction to his emotions of shame and inadequacy manifested as crying and having to leave the situation. Others spoke of suppressing or "sucking it all back in,", but

nonetheless there was a common thread of a bodily reaction accompanying student's emotions.

It also appeared that the ways in which students were experiencing emotion within the clinical setting was very new territory for them. Many students had not had to deal with these types of emotions before, particularly in a setting as navigationally complex as the clinics. By that I mean to say there are many competing factors that students were blending at once, including their emotions, their budding clinical competency, patient acuity, and future goals and expectations of themselves. There is no roadmap for being exposed to these kinds of rough waters, and students are at the infancy of learning how to predict the storms and be as prepared as possible to navigate through them.

In addition, these early experiences are largely shaping how students are starting to think about themselves and identify as physicians. This leads to the next major pedagogical theme in terms of this phenomenon, which suggests that students are experiencing emotion as a state of becoming that which they desire to be. Thus, I will now unpack the second major theme which is "Emotions as a State of Becoming."

Theme #2: Emotions as a State of Becoming.

As I continued to spend time with the data to mine the student narratives for emerging themes, I was struck by how the language that students used to describe their experiences with emotion had a certain ethereal quality to it. Almost as if there was something about their experiences of emotion that beckoned to them and caused a stirring of their soul. What I mean by this is that the stories that students often told showed evidence of an internal longing or pull for something more. So, the student's emotions were not just about the present experience, but something more significant: Something to be achieved, something to be grasped at, something to be longed for.

In many ways, students appeared to be experiencing emotions almost non-linearly. Undoubtedly, they were experiencing emotions at the moment and in real-time, but it also seemed as though students were experiencing emotions that were directed towards or related to future events. It was almost as if a future version of themselves were beckoning back in time, urging a heightened sense of awareness to the current event or situation. Interestingly, this juxtaposition between the immediacy of the moment and the pull of a future-orientated framework proved to be unsettling for many students. As strong or difficult emotions emerged, students appeared to be trying to reconcile these emotions with both their current reality as well as their vision for their future.

This layering of emotions, then, caused intense feelings of emotive dissonance as students attempted to set the navigational course for the rest of their career. This often placed students in this in-between phase of being neither here nor there. Meaning neither here as a medical student, nor there as a full-time clinical care provider. Thus, students found their experience of emotion was like a *state of becoming*. They seemed to be leaving or losing some aspect of themselves as they worked to create new identities as clinical professionals.

This theme had three primary ways that it manifested itself within the student's lived experiences accounts: 1. Metamorphosis of Identity, 2. Taking Flight, and 3. Migration to Residency. These three areas will be unpacked in the remainder of this section.

Thematic Manifestation: Metamorphosis of Identity. Much like a caterpillar in its final stage of transitioning into a butterfly, students seemed to be experiencing emotion as a metamorphosis of the soul. By that, I mean that the emotions that students were experiencing were causing them to ask questions of themselves. Big questions, that often required deep insight

related to why they entered medicine and where they might ultimately fit before they can really "take flight." Take Cheyenne's example, for instance, when she was on her first surgery rotation:

> It was a total knee arthroplasty, and I was retracting, I think it was the Femur as the surgeon was sawing off sort of like the tibial plateau. And I'm. And so when I'm sort of, you know, the five foot five versus the six three surgeon, um, and the tables up and I'm just kind of retracting with my hands, you know, fairly high. Um, and I can't really see very well. It's hard to sort of stay steady. Um, and so I remember, um, as I was attaching the retractors when they just like slipped out of place and the surgeon was like, okay, you know, like make sure you're holding it steady. Um, and I had been working with him I think for a week and a half or so at that point or maybe two weeks maybe we can have. And so then he sort of like put it back in place for me to hold and um, and it slipped again and at that point he was like, okay, you're done. Like I want you at the foot of the table, like, you know, no more touching anything you just watch for the rest of the case.
>
> And so I, you know, kind of moved down to the end of the table and I just remember feeling so defeated and feeling like almost like a failure because it, because it was like where I really wanted to be. I love being in the OR, and at the time I was very interested in Ortho, um, and I just felt like, you know, I don't know why I really felt like, oh, maybe can I just not do this? Like, is this not for me?

Certainly, an aspect of this example is suggesting that students need to know and grow from these experiences because their career depends on it. However, the emotions are not just isolated to that point in time, but they are thought of as non-linear in the sense that students see them playing out in many different ways. Their emotions are about something more significant than that moment. They are about trying to learn how to carve out and define their future roles. In referring to the same example, Cheyenne went on to say:

> You know, I, I really think it kinda just brings it back to the stereotype. Um, really because like as a woman trying to go into surgery, you want to act like you can, you know, hang with the guys and you can, um, you can do everything they can and stuff like that. And so I'm not being, being the shorter, shortest one in the room, um, having messed up and then getting kind of demoted down to the end of the table from assisting to just strictly observing. Um, I, I just felt like, like maybe the stereotype for a second, I think maybe the stereotype was right. Um, you know, can I really do this

> as a woman going into surgery? Um, so I think yeah, really the stereotype is why I felt defeated. Um, because you know, you try so hard to, to really quote unquote fit in and like you can really, you can do what they can.
>
> So part of it too is like if it's something that you want to go into, there is this, you're, you're kind of almost testing yourself, too, of like... you know, not only did I mess up, but like you're starting to question like this might be, this might be my entire future. And if, if I'm already, like if I'm being moved to the bottom of the table, like you... There's a, there's a lot at stake. There's more at stake in something that you want to go into and therefore maybe like stronger emotions and that, and that's probably why that example popped into my mind because like, it hits you harder than maybe, you know, the scale might be smaller on something that you're not like super interested in.

So her experience of emotion was bound up in perceptions about women in surgery, her self-doubts about her future career field, and self-imposed pressure to perform at a high level. In this way, Cheyenne's emotions were experienced as a sort of soul-level vulnerability, where she was faced with the reality of her fit with her specialty of choice. This stirring of the soul seemed to be challenging for some students, leaving them feeling inadequate in terms of their clinical proficiency. Rohit captured this well in his statement:

> And so I've had a lot of moments where I've come with a certain plan or come up with a diagnosis that's just completely wrong and I just, I take that to heart because I think if I was in their shoes and I made that diagnosis and I had that plan, like that patient would not be well off, and you know, I could seriously injure this patient. And so those kinds of inadequate moments where I feel like, you know, I'm not ready to be a, an intern because that's going to be, you know, a year and a half from now. Or I will be making those decisions. That could factor into whether a patient lives or dies and so, you know, I'm feeling inadequate now.

In this example, Rohit alludes to this "in-between" phase where students are no longer traditional medical students in the sense of classroom and book learning, but not yet clinical professionals either. Often, they are going through a very real phase of developing their own professional identities. However, they are doing this under a microscope. Tyler captured this sentiment well when he talked about his early third-year experience:

> I think a lot of it has to do with the first two years of medical school. We took so many exams, but we're all perfectionists, or we're, we'd like to be close to it so we could prepare for all the exams and we never really were put on the spot. So that first week when you can't really prepare for anything, um, I think that makes you super nervous to make a mistake. You're not used to that. You're so used to like being able to study and look really good on paper, but in person, you can't really prepare for everything. And that first rotation, first couple of weeks you're not used to that and you think that everyone has the expectation that you know everything. When in reality you just started your third year. They know you don't know anything. They're asking these questions because they want you to learn them and it's not so much like trying to make you look bad.

Not surprisingly, these perceived expectations that students place on themselves carry a great deal of weight. As a result, students often question themselves and, within that setting, experience self-doubt and inadequacy as a result. Like a caterpillar transitioning into a butterfly, though, these types of emotion-laden experiences seem to be stretching and pushing students towards what they ultimately hope to be. In turn, these emotional experiences also served as a launch point for students as they took flight into the next phase of their professional progression.

Thematic Manifestation: Taking Flight. For many students, the emotions they experienced in the clinical setting during their third year served as a jumping off, or launch point, for them in terms of self-discovery. By that, I mean that students often conceptualized or made meaning based on their emotions as pivotal events in terms of change they needed to make to better themselves in preparation for their future careers. More specifically, these emotions were action-oriented in that there was movement towards who they were becoming. So, like a bird taking flight, these events often propelled students to take a step off the ledge and spread their wings. Rene conveyed this sentiment well relating to his clinical clerkship experiences as follows:

> When I started though on my first clerkship, I was terrified. I'm like, should I speak up? Should I say anything? So I've evolved since I started

> on my first clerkship, which was internal medicine and for me internal medicine was terrifying because we're on the floor and there's like six residents and then you know, the attending and the other med students. So when he says something, everybody's eyes are on you. And when you get asked the question, everybody's eyes are on you. So for me it was like, Oh my God, Oh my God. But now it's like, now I've embraced the fact that I can't know everything by now. I'm here for training and if I don't know something then I'm modest, I'm like, you know what? I don't know, but I'll look it up. As opposed to before when I'm like, uh, and I would fumble or try to like, but now, now I'm like, okay, well, I dunno, I don't know.

Jason also talked about his movement forward in terms of his growth and being more "comfortable" as opposed to where he was at the beginning of his third year:

> Yeah, because, I mean, I'm comfortable with myself now, but you know, six months ago I'd do things like show up an hour early because some other guy is showing up early. Yeah. Um, and that's just like doing things that you don't want to do, but you feel like you need to do. I think that that's really the core of the worst part of being a medical student.
>
> But I think, you know, once you get comfortable with it, I'm not completely comfortable with it, but like you decide once you get comfortable just knowing who you are in, in your place, in the clinical setting and it becomes easier.

What this signaled to me is that students are experiencing emotions as a movement towards that which they hoped or wanted to be. In other words, these emotional experiences often manifested as motivating experiences, helping students transform from the caterpillars of the first two years of medical school to the butterflies they are hoping to become. Rohit mentions:

> You're going to make mistakes throughout your career. And so I guess like I'm sort of accepting that like mistakes, mistakes can be made, but you should, the way you react to those mistakes is what's important. And so I'm trying to maintain my motivation, and you know, maintain my ability to learn from my mistakes moving forward...If you're not really actively reflecting on those experiences and learning how to make it better than I feel like you're just, you're just going through this routine and not changing your practice to reflect that. And I feel like that's where burnout would come from.

Cheyenne had a similar launching off point in terms of her emotions, as she talked about how her experience in surgery caused her to develop "thicker skin" and become a little less defeatist about making a mistake or how she was perceived:

> And even after that experience, I did learn from it. Um, and you know, even after, I have been going on to like eight weeks of surgery, I think two months after that happened, um, I think I had thicker skin and if I did something, you know, that wasn't, not did something wrong, but if I was like retracting, like if it slipped or something like that, um, I didn't feel as defeated because I knew that I shouldn't take it personally.

For Cheyenne, then, her emotions from her early experiences served as a jumping off point for what she describes as being more comfortable in the clinical setting. She followed this up by saying:

> So there is pressure to sort of do the right thing all the time and perform perfectly every day. You know, what I know now is that, you know, nobody's perfect as medical students, we're going to make mistakes. If we didn't, we would be attendings by now, you know. So we're still learning.

So, what seems to be occurring based on the ways in which students talk about their experiences is that there is a period of transformation for many students in that student are not just having emotions but using their emotions to fuel their growth and understanding of medicine. In this way, experiencing emotion in the clinical setting is much like taking flight for the first time. There is some initial turbulence as students are figuring out how to respond to challenging emotions, but it appears that these early emotional experiences help to urge an immediacy to the evening out of their flight patterns and to set the navigational course for the future of their careers. This "navigational course setting" also emerged as a manifestation of the broader theme of emotions as a state of becoming. Specifically, experiencing emotion for the first time in clinical settings appeared to be like a personal migration towards that next step in

their journeys. Thus, I will now unpack the final manifestation of this theme which is that of emotions as a migration.

Thematic Manifestation: Migration to Residency. While the previous thematic manifestation outlines the ways in which students began to spread their wings and "take flight" for this first time, there was another aspect to this that began to manifest throughout the data. Specifically, it appears that students interpret their emotional experiences through the lens of how these experiences are preparing them for what is next. So, to experience emotion in the third year is a bit like beginning one's migration towards that next step in their journey. If we were to track the "flight patterns" of these third-year students, we would see that they are all heading towards residency. In this way, experiencing emotion for the first time in clinical settings is a bit like a personal migration towards that which they wish to become as future medical residents.

However, this migration is difficult. Leaving the relative safety of the academic structures in the first two years, to a long and tiring journey that certainly appears to tax the mental, emotional, and physical resources of the medical students. Thus, this next manifestation of this theme is that of students experiencing emotion like that of a personal migration. Their emotions seem to push them towards a sense of professional identity and wholeness that is just starting to form.

Rohit talked about this migration in terms of there always being a "next step" in the journey and said:

> But I think where some of the burnout that I've been experiencing comes from is from, you know, these frustrations in sort of like how do I, you know, how do I figure out what I want to do for the rest of my life. You know, specialty selection and planning for your fourth year. And it's like, I feel like there's always a next step. And that's where some of that burnout comes from is there's always a next clerkship or next exam to study for your next rotation to plan for or planning for the fourth year. And then, you know, planning for residency. There's always a next step that once I

> feel like I'm actually in my career that I'm going to do for the rest of my life, then I'll feel a little more focused on that career.

While this migratory process can be challenging, it often allows students to find their eventual landing place. Cheyenne talked about this in terms of "finding herself" as she was asked to speak about the impact that her emotional experience within the surgical setting had as she was immersed in the clinical rotations of her third year:

> And a lot of the times they'll say your specialty chooses you because your personality sort of fits in a particular specialty and you know, I consider myself a very empathetic person and I love working with patients and um, I don't consider myself the, you know, I just want to focus on getting this done and not talk to anybody else around me. I don't consider myself that type of person. Um, but a lot of qualities of surgeons and surgery itself, I do feel like I identify with. So I, I really do think you sort of find where your personality fits in the specialty. You know, it's like...finding yourself.

In addition to Cheyenne, it appeared that many students were reflecting on their experience in this way and making sense of them in a forward-looking manner. By that, I mean that students were inferring meaning in a way that looked towards their future fit and role within medicine. In this way, they were starting to migrate towards their future selves. So, these emotional experiences students are having are not just about that moment, but also about what kind of doctor they want to be in the future. In this same way, Robyn spoke of the impact of her experience in the clinical setting in a forward-looking direction, linking it to her future career in medicine.

> Definitely, there was a huge impact, and I would hope it helps with the growth of me and my interactions with patients. But again, to kind of reiterate I think what you said earlier with just the realness of it I think it just kind of helps to solidify that the patients are real people and it almost is a good thing for me to remember that when I'm going through, you know, chart reviewing. When you're chart reviewing a patient, you don't think of them as a patient it's just…sometimes it's just easy to take the personal nature of it out of the practice of medicine. So, I think it was a lesson for me to remember the story behind the person and remember that you know, even the tiniest of news could have huge implications in their

> everyday life. And so just to kind of see and remember the impact that whatever news you're delivering is having on them. I think that's probably a lesson that will stay with me forever.

This particular manifestation of emotions in the lives of medical students suggests that experiencing emotion in the third year is like a migration of one's identity. By that, I mean that there is something about the emotional experiences in the clinical setting that seem to be orienting students towards what it means to be a physician. This manifestation differs from metamorphosis in that, while metamorphosis focuses on the early stages of the third year when students are just beginning to ask themselves questions about who and what they want to be, migration is about the later stages of the third year when student's emotions seem more intimately connected to their journey towards their next step.

This journey can be difficult and, at times, the destination not always clear. However, it does seem that the phenomenon of emotionality in the third year tends to manifest in terms of providing students with a directional aid for helping them start to orient themselves towards finding a fit as a practicing physician. In this way, student emotionality in the third year is like a state of becoming a bit more "whole" or integrated as a budding professional. Nicole summed up this migration well by talking about finding joy with medicine during her third year:

> Um, I'd say the biggest thing for third year is I kind of rediscovered some of the joy of like why I decided to go to med school. After second year and studying for step, you're kind of like in this island, it's like, why did I do this to myself? Like my life is going to be these series of tests and actually getting out there and seeing patients and hearing their stories and being able to like share in some of their joys has just been an awesome experience. That's been really great. Kind of holding onto that, um, through all of this process is kind of helped carry through some of the other struggles that maybe you're having.

What was fascinating about this particular manifestation, in the end, was how there seemed to be a great deal of transformation going on for students within the clinical settings.

However, it also appeared as while students were learning about themselves and their fit in medicine, they were simultaneously learning about how and when to respond to emotion in the clinical settings. Specifically, there appeared to be a constructed nature to how students were learning about what it means to experience emotion in the clinical settings as a future doctor. Said differently, the student' experience of emotion was *situated*, or embedded, within the clinical environments in which they are training. Thus, we will now turn to our final theme which is that of emotions as situated.

Theme #3: Emotions as Situated.

When students spoke of their emotional experiences in the clinical setting, there was a sort of bounded nature to the ways that students spoke of and ascribed meaning to their emotional experiences in the clinical setting. By that, I mean that medical students experiences with emotion appeared to be learned and often limited by the context in which they were situated. In this way, the phenomenon of emotion in the clinical setting appeared to manifest as a situated conceptualization. This idea of emotions as situated stems from a sociocultural perspective, which purports that different forms of an emotion are constructed dynamically in specific situations, with each form producing an emotional experience adapted to current conditions (Lebois et al., 2018). In other words, to experience grief or sadness in a clinical setting may look and feel differently depending on the culture, history, and ideology of the organization or medical specialty. In this way, students frequently discussed learning the "performance rules," if you will, of emotions within the clinical setting. How these performance rules were constructed in the clinical setting is the focus of the first thematic manifestation of this theme, which relates to emotions as a learned phenomenon.

Thematic Manifestation: Emotions as Learned. One of the major ways that students were learning about the clinical performance rules was through the messages they received from residents and attendings related to how they should be interacting with patients. Stephanie talks about getting feedback from an attending physician on her encounter with a patient as follows:

> I have gotten some negative feedback on, you know, does it really matter to their acute care right now to know their emotion or to get an extra story? It doesn't matter. And so, you know, I don't want to be that medical student that they're like, I don't want to be with her because she makes rounds go two hours late, you know, so it's kinda too like trying to almost blend in without blending in too much because you don't want to seem uninterested, but you also don't want to waste their time. So it is tricky. Um, as a third, third year of trying to navigate that whole system.

Stephanie went on to talk about how she has started to trivialize patients in a way over her third year, which is a quality she does not enjoy seeing herself start to reflect. Specifically, she said:

> And I've even noticed in myself like patients that I don't connect with, um, if they do receive bad news, you know, it seems easier now at the end of my third year, than at the beginning to kinda just be like, you know, bad things happen to good people and kind of just brush it off, which is kind of a quality that I don't enjoy seeing myself start to reflect.
>
> Um, so I don't know if it's something that's necessary, but I've noticed that um, you know, attendings or older docs are definitely way better at kind of shifting aside the emotion and really just this is what it is. This is what we're doing now. And this is kind of your prognosis for the year.

So for Stephanie, she began to learn how to "do emotions" in terms of how they are to be enacted in the clinical setting (Micchiche, 2007). This occurred both through the formal messages she received, as well as the informal messages she gained from watching others.

Diana also talked about "picking up" on emotions of attending physicians based on the messages they receive about how to interact with patients:

> It's interesting how quickly students can pick up on emotions of attendings or whoever they're working with. Like for me personally, I worked at a

> pain medicine clinic and I remember there was a patient and the doctor was like, "Oh, this one's med seeking." So I went in assuming they were med seeking, judging them, you know, like really judging them for a lot of the things that they said. And then when I presented to the doctor with this sense of like condescending air, the doctor rechecked the chart and was like, "oh actually this patient is good." And so it surprised me how quickly I can judge someone negatively based on what other people said. Um, you get pretty cynical I think pretty quickly.
>
> And, I think you have to really reflect on what kind of doctor you want to be and make sure to pick up the things that you respect and try to ignore the things that you don't because we're actually very, like, we're kind of like sponges just like we pick up on our environment really quickly so I can see how like depending on what kind of doctors you work with, it can really shape what kind of doctor you're going to become.

I thought Diana's description of medical students being like sponges was an apt description of how emotions can be shared between student and physician. In particular, as students absorb the ways in which they see those around them responding to and displaying emotions, they start to embody those same characteristics in terms of how they respond to their emotions. In a way, this leads to emotions becoming a co-constructed phenomenon between students and care providers. The following interaction I had with Megan captures this idea well, as she talks about not wanting to react to her emotions in clinical settings. Specifically, she talks about how she learned to construct her response to challenging or sad situations in the clinical by watching others around her. In this case, she was referring to how she dealt with feelings of sadness in an in-patient clinical setting:

> I would feel those things, and I would like feel them, but I just wouldn't want them to react to them, or I would tell somebody, you know, I would like tell the patient like, wow, you know, like I'm so sorry, like this is really hard to respond some way, but like if I wanted to cry or like wanting to like have something, I would wait until I wasn't there anymore.

When asked about whether or not she felt like the environment supported those displays of emotion she said:

> I think that it depends a little bit on the specialty. It depends a little bit on like the people that you're with but like for a lot of medicine it's like you get used to it and you know that things are sad and you're just not supposed to like feel anything about them, and you're just supposed to be like, okay, okay, next. Okay, next. And you're not really supposed to be like feeling like that or reacting to things. Like it's much more like you're going through the mill, you're doing your work, you're working, and you're not supposed to be like feeling a lot or responding to things like that.

I then asked her, "And how did you learn that lesson?" and she responded:

> I think it's just like watching. Like I think it's just like watching people or like being there and seeing. I mean just seeing that like people can literally say such, such sad things that I really respond to or like I really feel a lot too. And just watching the provider, like have literally nothing and like actually like not even care really that it was said at all and I think that's part of it.

Based on these lived experience descriptions, then, it appears as though emotions are manifesting themselves as a learned phenomenon based upon the ways in which students observe residents and physicians interacting with patients. However, there is a deeper layer to this in that students are learning lessons about emotion that may stay with them a long time, perhaps even for their entire careers. So, in a way, this manifestation suggests that students are experiencing more than just emotional labor, or a suppressing of emotion, but something more akin to "emotional control" (Van Maanen & Kunda, 1989). This concept of emotional control can be construed as an advanced form of emotional labor (Hochschild, 1983) by which "an organization's culture can be managed by prescribing and monitoring the emotional aspects of organizational life through ceremonies, practices, and norms that become institutionalized over time and through inculcating values and motives linked to decision premises" (Mumby & Putnam, 1992). One way this plays out in medical contexts is by stripping away the emotive aspect of the patient experience and just focusing on treating the patient's acute needs in order to move on to the next one. When things start to get a little messy emotionally with patients, that

appears to be a time when physicians back off a bit. As Stephanie so keenly points out, "I had an attending make the comment of, you know, ‘that's why we get social work and that's why we get psychiatry involved so they can talk those things out. That's not our job, that's not our expertise.'"

However, while many discussed how they learned the feeling rules of the clinical setting by watching others, they also talked about how important their connections to others were when they described their experiences with emotion in the third year. Thus, our last thematic manifestation of this section relates to emotions as interconnected.

Thematic Manifestation: Emotions as Interconnected. One of the interesting ways in which emotions appeared within the lived experience descriptions was as an interconnected manifestation. By that, I mean that student emotions are interconnected with patients, care providers, and other students as well as an environment that has its own sets of rules and cultural norms that impact how emotions can be expressed and discussed. This seemed to manifest in terms of how students talked about the sheer depth and range of what they saw and dealt with during the third year. There was a uniqueness to the ways in which their feelings became intertwined with care providers and patients, and their role as third-year students seemed to play a significant factor in how students made meaning of their emotions.

Jessica captures this interconnectedness well when she describes just how much she saw daily:

> Well, I think like for like, yeah, you see a lot of emotions. Like doctors interacting with patients and doctors interacting with residents. Like we really do. We see, so medical students see everything, and I think a lot of people don't realize it. Like you have office politics, right? Like every office has office politics, you know, so and so's got such and such rank or whatever. And so we see we're like flies on the wall and people sometimes don't realize that. So we literally see how residents receive physician interactions. We see how nurses see residents, we see how residents see nurses, like we literally see how things function and don't function within a hospital system. We're constantly there and I think sometimes people

> forget that…or I don't know what they do when they turn around and decide it's a great idea to just to complain about my job to somebody who's shadowing me, doing my job.

It is interesting to note that Jessica alludes to the range of emotions that she sees throughout the day. Not just related to patients, but also related to interactions between care providers. So there appear to be interesting lessons that students learn as a part of simply living and breathing, or being embedded in, a clinical setting. Many students talked about these interactions between themselves and care providers as very much of a hierarchical system, in that students were often referred to as being on the "bottom of the totem pole." This seemed to impact how emotions manifested for students. Tyler touched on this hierarchy by saying:

> Third year you don't want the attention to really be on you or like kind of take away from the conversation, you're being one way or another and you kind of want to hold onto some of those stronger emotions. Um, but it's, it's hard to sometimes when the rest of the team has like some animosity or like during difficult times, like a patient is not doing well and the team starts kind of fighting amongst itself. It's, it's easy to kind of get wrapped up in that. And I think those were some of the harder emotional times is like knowing that you're on the bottom of the totem pole and everyone else is having a bad day and they're just kinda going to be angry with you for no reason. Um, so I think that's like a tough emotional thing as a third year is just to kind of say. Yep, Yep. Sorry about that when you had nothing to do with it. And just because it's gonna help the team, like just let them vent at you for a little bit.

So, Tyler points to an interesting phenomenon here of students sometimes suppressing emotion due to the role that they are asked to play in the clinical setting. Specifically, emotions appear to be embedded in this hierarchical system and tend to manifest for students as being perceived as less important than those higher up the ladder. This concept may explain part of the reason why the number one response to emotion within my data set was students feeling that they were not free to express emotion and they, in turn, held them in. Jessica's quote about not even being at the bottom of the totem pole, but buried in the ground tends to reiterate this point:

> And we've even had a physician tell us, like you're not even at the bottom of the totem pole, you're like buried under the ground that's holding the totem pole, you know, like you're that part of the totem pole that's like buried under the ground for support.

However, even with students being on the bottom rung of the ladder, so to speak, their patient experiences can still be powerful. Students frequently noted having emotional experiences that were interconnected with patients. Megan described the emotions she experienced when working with patients in the third year as follows:

> I think it's everything. It's like the frequency, the range, the depth, that's like every day you feel a lot, and there's a lot going on every day and it's just completely different, and you're just like interacting with people in a really, really different way. And it's like, you're just so much of the time I feel like it's just such an honor to get to be doing what I'm doing because it's like you're let into this sacred part of somebody's life that maybe nobody else in their family knows about it or they haven't told anybody or something's going on or something they're ashamed about or there's just so many different things and it's like you're allowed to be there. Like no one else is. Or like even like right now I'm on surgery and like it's just amazing. It's like I like my hand is inside of this person's abdomen, like how many other people's hands have ever been inside this person's abdomen? Like very, very few. It's just a total honor.

In Megan's story, it appears she derived a great deal of meaning from the sacredness of being let into the life of a patient. In this way, her emotions were very much rooted in the way she perceives her role in the clinical setting, and how much of an honor it is for her to care for patients within that setting.

Rene, too, discusses how his emotions were entwined with a patient he cared for who also happened to be an immigrant. He addressed the connectedness he felt by saying:

> So for me, it's like, I, I've lived a lot of these things. I truly know what you're going through because I was there, I've been there, you know, I've, you know, I've been, um, I'm an immigrant, so I've went through the danger of crossing the border, you know, I've been homeless, so I know what it feels like to be homeless. I know what it is to not have food. I know what it is to be sick. I know what it is to be poor. I know what it is to be involved in gangs and what violence is. So for me, it's like, um, if I

> encounter a patient, a patient that's poor, doesn't have the means to afford their medication and everybody else is saying "Oh, well he's just not adherent." Well, no, you know, um, if you've never experienced this, you probably wouldn't know how to react as well, you know.

In these stories, then, it seems as though emotions are very much a product of the connectedness that students have with care providers and with patients. In this way, the lessons students are learning about how to respond to emotions manifest through the connections that they have with patients and care providers as well as the actions and conversations they witness within the clinical settings.

Summary

In this chapter, I presented the research findings in a narrative form utilizing van Manen's (1990) framework for conducting phenomenological research. Specifically, within this chapter, I described the phenomenon of emotions within the third year of medical school through the art of writing and re-writing using an interpretative approach.

Further, the thematic manifestations of this phenomenon were captured by situating the phenomenon within the multiple and varied ways they manifested within the world. These themes were (1) Emotions as a pop-up storm, (2) Emotions as a state of becoming, and (3) Emotions as situated. Next, in Chapter 6, I will be discussing the conclusions and implications of these research findings in terms of addressing the challenges related to wellness needs for students entering their third year of medical school.

CHAPTER 6: CONCLUSIONS AND IMPLICATIONS

In this chapter, I first present a summary of the research study followed by an overview of the research findings as they relate to the three research questions that guided this inquiry. I then discuss the connections between my findings and the literature, as well as implications for the research findings. These insights are used to guide practical suggestions for addressing the challenges that medical students face in adjusting to the clinical settings of the third year of medical school. Finally, I end the chapter addressing directions for future research.

Summary of the Research Study

This interpretative phenomenological study explored the lived experience of medical students while experiencing emotion in the clinical settings of medical school. This was undertaken to better understand the ways that emotions manifest themselves in and through the lives of medical students as a product of "being in" the clinical years of medical school. Narrative accounts from the research participants' lived experiences with emotion as they entered clinical environments for the first time in the third year of medical school were collected and analyzed to provide insight into the medical student experience and contribute to existing literature on medical student emotionality and wellbeing.

This study began with an exploration of the lived experiences of twelve medical students engaged in the clinical rotations of their third year of medical school. An interpretative phenomenological methodology was utilized to structure the interviews and investigate the findings. A research design developed by van Manen (1990) included six research activities that guided the analysis and uncovering of thematic manifestations of my phenomenon of interest.

The purpose of this study was to gain an understanding of how medical students experience, respond to, and uncover meaning related to their emotional experiences in the

clinical settings of the third year of medical school. This was investigated by addressing the following research questions: (1) What is it like for medical students to experience emotion in the third-year clinical settings of medical school? (2) How are students responding to their emotions in the clinical settings? and (3) How is meaning being revealed to medical students through their emotions?

Summary of the Research Findings

Research findings were presented as narrative accounts of lived experiences that described meaningful manifestations of the medical student's experience with emotion in the clinical setting. Three broad themes were identified based on the significant pedagogical ways that the manifestation of emotions was revealed in the data. Notably, emotions appeared to be experienced as a pop-up storm, as a state of becoming, and as a situated conception for medical students. Collectively, these themes address the three research questions that guided the study:

(Q1): What is it like for medical students to experience emotion in the third-year clinical settings of medical school?

According to the participants' narratives, experiencing emotion in the third-year clinical settings of medical school is like being caught in a pop-up storm *(Theme #1: Emotions as a Pop-up Storm)*. Specifically, the narrative accounts pointed to a suddenness in terms of how emotions were manifesting in their lives. Commonly, this suddenness caught students off-guard and appeared to intensify their experience with their emotions. Students expressed feeling overwhelmed in the clinical setting, often as a product of their inability to negotiate and respond to the unexpected bursts of emotionality that commonly accompany patient interactions in the third year of medical school. Students, then, frequently found themselves "trying to keep dry in the rain storm" as they sought ways to guard themselves from being caught unprepared for the

downpour. This often meant that students would suppress emotions in an attempt to reconcile their emotional experiences with the perceived clinical feeling rules of the clinical setting. In turn, student's experiences with emotion left them navigating difficult waters in that their common navigational aids that were utilized to right the ship in the first two years of medical school no longer seemed to be effective. Instead of putting in more book work, which had been successful for students in more traditional modalities of learning, students were required to put in more "heart work" in the clinical settings. Students commented on this type of work being "difficult" and "frustrating", as the link between input and success is a little less clear. In turn, these experiences with emotion often left students questioning their fit within particular specialties as well as their effectiveness as future physicians.

(Q2): How are students responding to their emotions in the clinical settings?

While my data supported the assertion that it is extremely common for students to suppress their emotions within the clinical setting, my research also sought a deeper understanding of the reasons behind student's responses to emotion. From a phenomenological perspective, it appeared that student's responses to emotions were manifesting as a product of the environment in which students were situated. In this way, students were responding to their emotions as a learned, or situated, phenomenon *(Theme #3: Emotions as Situated)*. Specifically, student's responses to their emotions were manifesting as a learned conceptualization, in that they felt as though they were following the "performance rules" of the clinical setting. One student even suggested that medical students were like "sponges," picking up on their environment very quickly. Thus, students seemed to formulate their responses to their emotions based on what they witnessed others doing around them. In this way, medical student's responses to their emotions were largely socially constructed, as they were responding to emotions as a *co-*

constructed phenomenon, where responses were influenced, shaped, and even controlled by those within the health care setting that were serving as evaluators or mentors to the medical students.

Medical student's responses to emotions in the clinical setting also appeared to be manifesting as an *interconnected* phenomenon, in that their responses to emotions were often woven together with the others in the health care setting. There exists a sort of emotional exchange that medical students have with care providers and patients, in that the intimate connections that students have with those they work with and serve teach them valuable lessons about how to respond to emotions. Specifically, students seemed to be responding to emotions hierarchically – in that they responded to emotions based on how they believe those higher up the totem pole would want them to react. In this way, student's responses to their emotions are as much, or more, about how they believe others are perceiving them to be experiencing emotion as they are the emotions themselves. This finding led to important insight related to the third question about how meaning was revealed to students through their emotions. Namely, there appeared to be the lived meaning of the emotion in the moment for students, but also the constructed meaning that occurred later. This discovery was the tied in to my third, and final, research question.

(Q3) How is meaning being revealed to medical students through their emotions?

One of the most interesting findings from this research was gaining un understanding of how medical students were coming to understand themselves through their emotions within clinical settings. Notably, meaning was frequently revealed to students through a future-oriented framework. Specifically, medical students framed the understanding of their emotions in the clinical setting as a state of becoming *(Theme #2: Emotions as a State of Becoming)*.

Many students that were a part of my study spoke of their emotions as something that disclosed to them their future paths and helped them uncover meaning related to their identities as future physicians. So, they used language that seemed to indicate that their emotional experiences were an important part of their journeys in terms of discovering who they are in clinical settings and where they might best fit. This process of self-discovery was an important part of them gaining a certain level of comfort with the emotional storms of the clinical settings, as well as causing them to seriously question their landing place within clinical medicine. In a way, these experiences with emotion helped students to begin to create frameworks in terms of how they began to self-categorize themselves and sort themselves into different paths in medicine. This self-categorization seemed to be an important part of the third year of medical school, and it appeared the ways that medical students framed the understanding of their emotions played a crucial role in how students went about making decisions on which path might be best for them.

Connections to the Literature

As I previously identified in Chapter Two, there are two predominant lines of research that dominate the landscape related to the literature on emotions. One branch examines emotions as *inheren*t while the other examines emotions as *socio-cultural*. Empirical studies within medical education have predominately viewed emotions as a skill, which positions emotion as much more of an inherent, non-changing, cognitive aspect of one's personhood. Previous research has not directly explored how students experience and understand their emotions in the clinical setting, so drawing parallels between my findings and current existing literature is necessary to be able to suggest implications and future directions for research.

My first finding related to ***emotions as a pop-up storm*** speaks to the way students experience emotion in the clinical years of medical school. Namely, that emotions are manifesting suddenly and often unexpectedly for students, particularly as they have encounters with patients facing real life medical issues and challenging circumstances. In turn, students often feel unprepared for their strong emotions and seek refuge by suppressing or putting on a strong front within clinical settings.

Findings here do seem to support the notion of emotions as more of an inherent conception. Specifically, my findings within this theme pointed to the lived immediacy of emotions within the lives of medical students. As stated earlier, emotions were very much an *embodied* conceptualization for medical students in that they were felt experiences of bodily sensations triggered by sensory stimuli (James, 1890). What was noteworthy from my research, however, was learning how these sudden emotional storms were experienced within the body, and later socially constructed within situations and environments. For example, the urge to cry and the rule against crying were both present in my research, and part of the way students uncovered meaning related to their emotional experiences.

Within my research, it seems that many of the medical students talked about the difficulty of trying to integrate their embodied emotional experiences with their clinical work. Jessica used the words "sucking it all back in" and Rene stated he had to "dig deep not to say anything out of line" when referring to their attempt to suppress their emotions and remain "objective" in the clinical setting.

The intersection, then, of the emotions as embodied and emotions as constructed seem to most closely resemble literature on *emotional labor* in the workplace, which is the idea that we manage our feelings to create a publicly observable facial and bodily display (Hochschild, 1983).

This emotion management comes at a cost, as just like physical labor, "the worker can become estranged or alienated from an aspect of self – either the body or the margins of the soul – that is *used* to doing the work" (Hochschild, 1983, p. 7).

Hochschild (1983) suggests that the essential problem with the "managed heart" is how to adjust one's self to the role in a way that allows some flow of self into the role but minimizes the stress the role puts on the self. Based on my findings, I suggest that medical students have not yet figured out this balance of being objective enough to minimize the stress of the clinical setting while also allowing enough of themselves into their role to feel integrated in the clinics.

My finding that emotions manifests for students like *navigating difficult waters* is an apt example here, as this navigational process takes some time for students to figure out. Particularly when looking at the range of experiences that students have in the third year of medical school. Many students talked about the fact that once they got comfortable on one rotation, they shifted to another one. In addition, through the numerous stories that students told, they appear to be participating in many high-stress activities, such as delivering babies, participating in surgical procedures, cancer screenings, mental health evaluations, ICU monitoring, and delivering bad news to loved ones. Students are experiencing these things for the first time alongside care providers and patients, while also being asked to connect with patients with a certain amount of empathy and compassion. Thus, this first thematic manifestation of emotions in the clinical setting as a pop-up storm points to the work that is required of students as they calibrate their navigational aids for the emotional demands of the third year of medical school.

My second theme found that students are experiencing ***emotions as a state of becoming***. I believe that the crux of this finding points to the ways that emotions leads them out into the future. Specifically, my finding that emotions manifest for students as a state of becoming

suggests that medical students are not simply learning about appropriate displays of emotion in the clinical setting but also discovering *where they fit* in terms of their specialty choice and identities as physicians. Said differently, students construct meaning from their emotions *towards* their still developing professional identities through the messages they receive about emotionality in the various clinical settings they occupy in the third year of medical school.

This finding in my research parallels research related to professional identity formation in medical school. Literature related to identity formation suggests that during their medical school years, medical students are actively shaping their professional identity and their perception of what comprises "good and bad doctoring" (Elliot et al., 2009; Hafferty, 1998). Jarvis-Selinger et al. (2012) describes the formation of identities as an adaptive, developmental process that happens simultaneously at two levels: (1) at the level of the individual, which involves the psychosocial development of the person and (2) at the collective level, which involves a socialization of the person into appropriate roles and forms of participation in the community's work.

Much of the literature examining professional identity formation in medical education has explored the concept from the collective role, recognizing that medical students' important interactions occur in social institutions with established practices such as universities, hospitals, hospices, and community care organizations (Goldie, 2012). However, my findings seem to suggest that there is important identity formation that is occurring at the individual level as well, as students appear to be going through a *metamorphosis* of the soul, of sorts, in terms of how they evoke meaning about their vocation, or calling towards, certain specialties and roles in medicine through the emotionally powerful incidents of the third year. These emotionally salient

incidents, then, represent powerful stimuli for the development of professional values and identity (Branch et al., 2005).

For example, Cheyenne suggested the impact that the challenging emotions she encountered during her third year had on her was that of "finding herself." In addition, Rohit talked about the importance of reflecting on the difficult experiences he had in the third year by saying, "If you're not really actively reflecting on those [emotional] experiences and learning how to make it better than I feel like you're just, you're just going through this routine and not changing your practice to reflect that." Thus, this process of identity formation at the level of the individual includes experience and reflection, service, growth in knowledge of self and of the field, and constant attention to the inner life as well as the life of action (Inui, 2003).

My study seemed to suggest that students are making meaning regarding their emotions beyond their current situation in the clinical settings as they look ahead to their professional careers in medicine. In this way, student's emotions serve as signals to the self regarding the quality and acceptability of one's identity claims and performances, and emotions can lead to changes in role behavior, network memberships, and ultimately, social structure (Thoits, 1989). In turn, this finding relates closely to research related to professional identity formation in medical school. I will further unpack this concept and suggest a conceptual model based on this finding later in this chapter.

My third theme suggests ***emotions are situated*** for students, in that student's experiences with and expressions of emotion were very much a learned conception, particularly specific to the cultural rules of the clinical environments where they were located. This finding frames emotion from a sociocultural perspective, in that experiencing emotion for students is less a condition then it is a process, with cultural definitions and cultural rules impacting the outcome

of an emotion (Ekman et al., 1987). My research findings suggest that these cultural rules are not only impacting the outcome and response to an emotion, but also shaping the ways that students to begin to think of themselves as physicians.

For example, Stephanie talked about how she has noticed during her third year that she has started to distance herself from patients who received bad news and kind of "brush off" the bad news, which she says, "is a quality that I don't enjoy seeing myself start to reflect." Similarly, Diana talked about how during a particular specialty she started to become cynical and stated, "it surprised me how quickly I can judge someone negatively based on what other people said. Um, you get pretty cynical, I think, pretty quickly."

As mentioned previously, one of the purposes of this study is to gain a greater understanding of not just the emotions that students are experiencing, but more importantly *how* these emotions are manifesting themselves in the lived, everyday experiences of students. Thus, based on my research findings, a specific type of sociocultural theory that seems to explain the situated nature of emotions in the clinical years of medical school is that of *symbolic interactionism*.

Symbolic interactionism falls into a sociocultural domain in that the key determinants of emotional experiences are not physiological but sociocultural (Thoits, 1989). As stated above, the sociocultural perspective suggests that emotions are not hard-wired in bio-psychological feeling states but inferred from the socially embedded responses whose significance lies in culturally interpreted relations between person-person and person-situation (Solomon, 1984). So, the same arousal may be experienced as joy or anger, depending on available situational cues (Schachter & Singer 1962). The specific symbolic interactionist perspective suggests that, within

limits set by social norms and internal stimuli, individuals construct their emotions; and their definitions and interpretations are critical to this often emergent process (Shott, 1979).

The term comes from the idea that human interaction is mediated by the use of symbols and by interpreting or ascertaining the meaning of one another's actions (Blumer 1962). So, this perspective treats emotions as mediating variables in the sense that emotion becomes a meaningful object to be interpreted, controlled, used, or managed by social actors, who are engaged in understanding themselves and managing others' impressions of them (Thoits, 1989). I referred to this idea of "emotional control" in Chapter Five by suggesting that this is an advanced form of emotional labor, in that students are beginning to make sometimes lifelong commitments to how they will be responding to their emotions based on the institutionalized norms they experience in the clinical setting.

This particular framework, then, provides a lens into understanding not just what types of emotions students are experiencing, but how these emotions are shaped by the very environment in which they are experiencing these emotions. Said differently, students not only experience emotions in medical school, but they also learn how to experience emotions as they pass through various stages of training to become physicians (Eikeland et al., 2014; Helmich et al., 2012). This perspective on emotions is largely ignored in medical education literature and, based on my research findings, is critical to explore in order to understand how students are integrating these emotional experiences with their notions of self and budding identities as future doctors.

In the next section of this chapter, I turn to implications related to my findings, particularly as they relate to practical interventions that might inform medical educators working with students in the clinical years of medical school.

Implications of the Findings for Practice

I believe there are two major implications from my research findings that correspond to the themes that emerged in my data. Broadly, these implications will contribute to the literature in medical education related to medical student emotionality and wellbeing in medical school. The first implication relates to a practical solution to helping students gain a better understanding of how they are going to be experiencing emotions as they transition to clinical environments. The second implication provides a framework to address the ways that medical students are incorporating their emotion into aspects of their professional identity in clinical settings. A conceptual model is proposed as a part of this implication based off my research findings. I will further unpack these implications below.

Implication #1: Teaching Emotions through Medical Improvisation

Based on my findings related to my first research question (*i.e., How are medical students experiencing emotion in the clinical settings of the third year of medical school?*), I believe that my research will contribute to the design of stronger interventions targeting the emotional development of medical students *prior to* entering clinical environments. More specifically, these interventions can help students better understand and frame their experiences with emotion in the clinical years of medical school.

One of the most novel approaches to helping medical students grow as professionals during medical school is the use of medical improvisation, or medical improv for short, to help students start to learn the rhythm and pace of the clinical settings. Specifically, medical improv involves the adaption of improvisational principles and exercises to enhance such medical skills as communication, teamwork, and cognition (Watson & Fu, 2016). A typical medical improve course does not focus on medical scenarios exclusively, but rather uses many kinds of roles and

settings to allow for the freest possible exploration of the risks and reward of improvisation (O'Reilly, 2011). The rules of improv are simple: once a scene has been set and characters identified, the key component of the dialogue between actors is the principle of "yes-and", where one affirms what their scene partner creates and then contributes to it (Watson, 2011).

What is so significant about this type of training for medical students is that it is entirely focuses on having students engaged in the moment. This has importance related to my research findings because emotions are often experienced like a pop-up storm within the clinical setting. These pop-up storms often leave students with little time to process or craft what might be through of as the "right" or "perfect" response to their emotions, but rather requires the sort of quick thinking that improve requires. As stated by Katie Watson, assistant professor at Northwestern's Medical Humanities and Bioethics Program who also teaches at Second City suggests, "A lot of these improv exercises are about whether you can have your brain, body and emotions 100% in this moment, not looking forward or backward. That is the foundation of the art form of improvisation, and it's important, absolutely, for physicians in dealing with patients and their teammates and collaborators as well" (O'Reilly, 2011).

The importance of using this method as an intervention to aid students in being prepared for the emotional storms of the third year of medical school cannot be understated. Particularly because much of the literature related to emotions in medical school approaches the construct from a purely cognitive framework (Shapiro, 2011). In turn, then, much of the resulting interventions related to student emotionality focus on a set of cognitive and behavior skills rather than a process that incorporates emotional resonance (Shapiro, 2011; Winefield & Chur-Hansen, 2000). Thus, emotions are viewed as a construct that can be placed under firm cognitive control (Derksen et al., 2013).

As an alternative to the more cognitive, skill-based, frameworks and interventions, I posit that utilizing medical improv will help teach students how to navigate the emotions that manifest like a pop-up storm in clinical settings. Specifically, medical improv will serve to help students begin to practice developing communication strategies that lend themselves to the timing and emotional rhythms of the clinical settings. Additionally, since medical improv will engage students at more of a "heart level", medical educators will be better able to help students understand their emotions as a lived, embodied manifestation, rather than viewing emotions as a cognitive construct that needs to be managed or suppressed. In turn, this recognition occurring *before* students enter clinical environments will allow them to begin to develop strategies and tools that will help integrate their emotions into their work once they arrive in clinical settings. As Hochschild (1983) suggests, the real work of the "managed heart" is figuring out how much of oneself to integrate into a professional setting. I believe that medical improv is an excellent training ground for students to begin to work this process out.

Implication #2: Building Trauma-Informed Medical School Communities

The field of medicine has made great strides in equipping health care providers with tools to better serve patients who have experienced trauma. Namely, a sweeping movement in health care to incorporate trauma-informed care (TIC) has helped make practitioners more aware of the importance of creating safe spaces for patients who may have experienced prior trauma in their lives. TIC, specifically, is defined as practices that promote a culture of safety, empowerment, and healing (Tello, 2019). However, while TIC has been well positioned to help care providers recognize traumatic stress in others, it has not addressed the traumatic exposure that many medical professional experience as a result of working in clinical settings (Sendler, Rutkowska, & Makara-Studzinska, 2016; Persaud, 2005). More notably, given the fact that upwards of 63%

of medical students witness at least one traumatic event during their third year of medical school, it is imperative that interventions be developed to help medical students respond to and process their own trauma as a result of their work in clinical settings (Haglund et al., 2009).

Within my study, many of the medical students discussed encounters with patients who had previously or were currently experiencing trauma in their lives. Much of the language that they used to describe these experiences involved a level of connectedness that they felt with their patients. Specifically, they used language like "it's like you're let into this sacred part of somebody's life", or "I've lived a lot of these things. So for me it's like, okay, I, I truly know what you're going through because I was there, I've been there."

However, this level of connectedness that students felt with patients also appeared to elicit their own feelings of trauma when a patient's story connected to something in their past, or triggered an unexpected or stressful emotion in their own lives. For example, Rene used language that indicated he was experiencing traumatic stress when dealing with a child brought in to the hospital with sever burns inflicted by his parents. He stated:

> Well, um, it's for me, um, I mean any, any form of abuse, whether it's child or women and it just hits. It's a soft spot in my heart due to previous experiences. So, um, due to trauma basically. And um not until, um, before med school, like two, three years before medical school that I learned to process my emotions and regulate in a healthy way. So, um, I actually attended therapy, um, back in California before coming to med school because of my previous experiences and trauma that I've experienced. So, um, so for me, I was more reactive as opposed to objective.

What this suggests is that medical students will respond to emotional events, in part, based on their past experiences of trauma. This is not the same thing as Post Traumatic Stress Disorder, but rather that events in medical school can activate traumatic memories. Literature in medical education describes this sort of trauma as vicarious traumatization, which is a term

describing the effects of empathetic engagement when working with victims of trauma and violence (Al-Mateen et al., 2015). A recent study found that over a quarter of medical students are reporting symptoms of vicarious trauma, particularity during psychiatry, ob-gyn, and surgery clerkships (Al-Mateen et al., 2015). Specific symptoms of vicarious trauma include apathy, hopelessness, exhaustion, irritability, cynicism, and disillusionment (Pross, 2006).

There were certainly lived experience descriptions within my data set that pointed towards this sort of vicarious trauma. For instance, Brittany described the traumatic stress that she experienced because of being her immersion in immersed her forensic pathology rotation, saying that:

> You know, like I felt, I think I'm a pretty empathic person to start with. Like I feel everything all the time very, very deeply. And um, and so like every case that came in, I just found myself like kind of getting in the headspace of this person as to what brought them here and then you can. I think I could only do that like two times if there was a third body. I mean I pretty much just, I think I would just turn it off at that point and just exist in my own world and I didn't really pay much attention.
> Yeah. I think the, the overwhelming part maybe is better described as just emotional exhaustion. Like I felt like I was being drained of emotional bandwidth in experiencing these people's deaths.

Ultimately vicarious traumatization leads to what researcher label “compassion fatigue”, meaning that medical students eventually become disengaged from their patients and role. Ultimately, then, this culminates in a reduction or inability to feel empathy and compassion toward patients and an inability to provide the patient care that is deemed appropriate (Coetzee & Laschinger, 2017). The danger here, of course, is that if care givers start to experience emotional burn out and start to distance themselves from patients, they can be a danger to themselves and their patients. Britany puts this well by saying, “An apathetic physician is not a safe physician. I think if you find yourself as a physician in your career and you feel apathy towards your patients

or towards your practice, I think you are in a really dangerous place where you are not making smart choices."

While medicine has made great gains in recognizing the need for a trauma based approach to patient care, I suggest that medical schools adopt a trauma-informed care approach to helping medical students navigate the trauma they may experience during their clinical training while in medical school.

Implication #3: Incorporating Emotions in Professional Identity Formation Models

The fact that so many students were using their emotions to make important decisions about their future and identities as physicians (*i.e. Emotions as a State of Becoming*) underscores the need for a greater focus on the role of the emotions in professional identity development in medical school. Specifically, professional identity formation for medical students refers to the foundational process one experiences during the transformation from lay person to physician (Holden et al., 2012). So, "who am I becoming as I move towards this life of service?" is a critical question in identity formation, as disciplinary acculturation and expertise increases (Inui, 2003).

My findings pointed to the idea that a student's inner emotional life guides a great deal of the ways they begin to think of themselves as future physicians. Said differently, the emotionally salient incidents in the clinical clerkships of the third year represent powerful stimuli for the development of professional values and identity (Branch et al., 2005). However, as my findings also eluded to, students are uncovering meaning relating to their emotions in a highly situated environment (*Theme #3, Emotions as Situated*), where displays of emotionality are largely discouraged and students are learning the emotional performance rules of medicine for the first time. Currently, there are no conceptual models related to medical student emotionality that have

successfully blended these two conceptions (i.e. emotions as a state of becoming, and emotions as situated) together to help guide educators in the ways in which identity formation happens for students in the third year of medical school. Thus, I have created an identity framework in Figure 2 below that demonstrates both the individual and sociocultural factors that influence medical student professional identity formation. Based on my research, I posit that the emotions that medical students experience are the conduit by which they begin to form the foundations of their identities in medicine. In other words, the way that students respond and make meaning related to their emotions serve as the *content* of their identities (Burke & Stets, 2009). So, this research will certainly contribute to theory in this area, by offering a view of emotions that conveys the idea of emotions as not just something that needs to be managed, but as something internal that drives and shapes student's thoughts and actions.

Figure 2 below outlines the multiple factors that influence how students make meaning of their emotions. What this figure is suggesting is that student's experiences with emotion in the third year of medical school have important contributions in shaping their professional identities as physicians. Specifically, based on the findings of my research, students utilize their emotions to make meaning regarding their professional identities within medicine. However, as this model suggests, student's meaning-making is heavily influenced by both individual and sociocultural factors. In terms of individual factors, student's meaning-making is influenced by both their own identity and background, as well as their personal goals and desires. The individual factors are situated on the top side of the model and point to the ways in which student's individual circumstances relate to meaning-making.

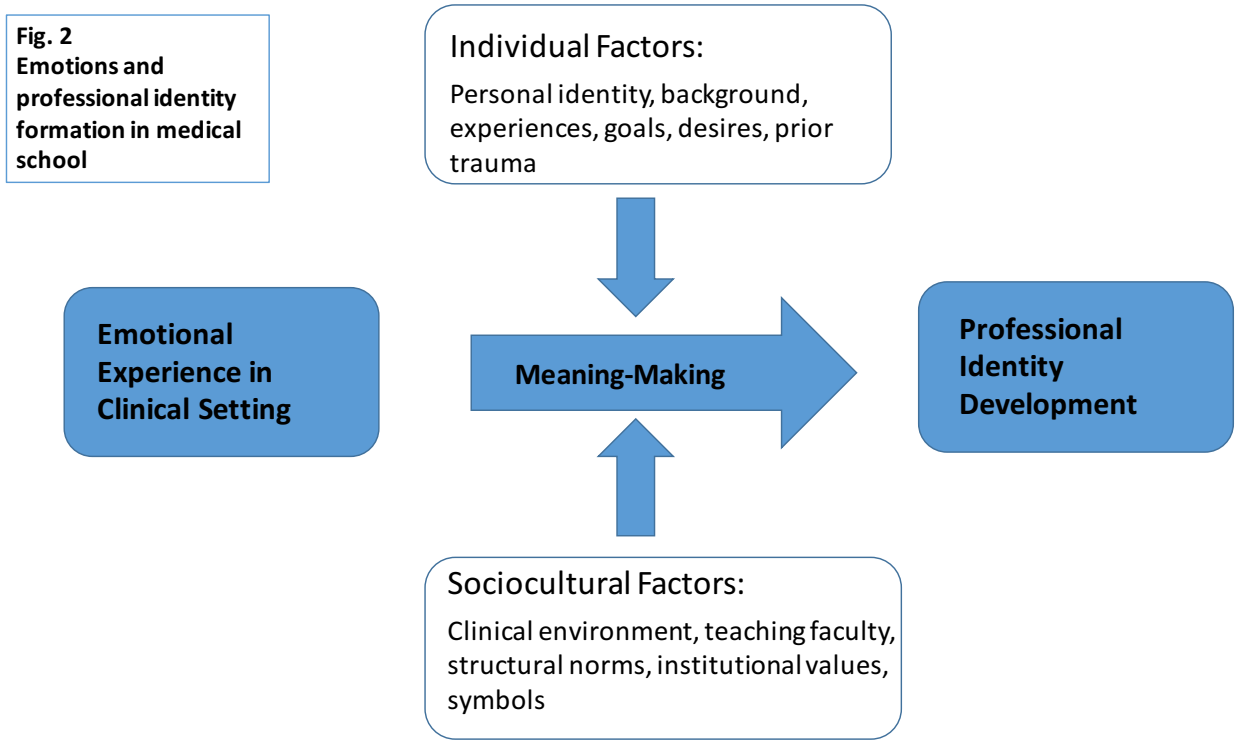
The sociocultural factors include more environemntal influences, such as the contextual factors like how students are evaluated, to the broader structural factors like the norms and

values related to how the field of medicine is structured and organized. So, for example, when students talk about being embedded in a hierarchy, and how that hierarchy dictates their displays of emotion, this constitutes a sociocultural influence on their meaning-making.

Of course, not all these factors exert equal influence for all students. However, it was clear from my interviews that students are making meaning in relation to their professional identities, and their meaning-making is influenced by both individual and sociocultural influences.

Figure 2:

Emotions and professional identity formation in medical school



Directions for Future Research

Based on the findings of this research, I argue that a greater focus on how medical student's inner emotional life guides the ways they begin to think of themselves as future physicians would contribute positively to existing research on student development and wellbeing. Specifically, focusing on medical student professional identity formation from the level of the individual is needed, in that it appears students are learning valuable and important lessons about themselves through both the positive and negative emotional experiences they encounter in clinical settings. Current literature examining professional identity formation in medical education has mainly explored the concept from the collective or organizational role, which looks at identity as a socialization of the person into appropriate roles and forms of participation in the community's work (Goldie, 2012; Jarvis-Selinger et al., 2012). However, as my conceptual model suggests, there is a great deal of identity formation occurring for students related to the way they make meaning based off their emotions. Thus, future research could examine and test this conceptual model, specifically looking at the link between emotions and professional identity formation for students in medical school.

In addition, my research findings suggest that there is a certain amount of emotional co-construction going on in the clinical years of medical school, as students are learning how to perform emotionally in clinical settings (*Theme #3 – Emotions as Situated*). However, there currently exists little to no research examining how this emotional co-constructing is occurring, and what value students place on the role of this in their clinical life. Additional phenomenological research could examine what it is like for students to co-construct emotion in the clinics in terms of how and why it occurs and what value students derive from this. I believe research in this area would aid clinical teaching faculty in medical schools in terms of their

ability to understand the importance of medical student emotionality as being co-constructed alongside the students they are teaching in clinical settings. This type of research is particularly important because students frequently spoke of looking to the attending physicians for guidance or clues as to appropriate displays of emotion in the clinical settings. Currently, there exist no conceptual models of faculty development that position emotions as a co-constructed phenomenon between student and clinical teaching faculty.

Lastly, the continued exploration of the role of emotional labor in the lives of medical students is an understudied, but critical, aspect of quality of life for future doctors as well as effective patient care. For it is through continued research in this important area that we in the field of education can continue to discover new ways to help bring light to the emotional perils that plague the career and personal lives of medical students and physicians across the world. What is clear is that taking this issue seriously involves much more than simply teaching courses on empathy or wellness but studying real life experiences and processing these experiences through a phenomenological lens in the context of everyday life. Ultimately this investment in studying lived experiences will help to ensure that the emotional lives of physicians are being acknowledged and that adequate space is given in the literature to the inward journey that medical students take as they transition to the clinical settings of medical school. I would suggest that the only way that progress might be made on this issue is if we are willing to begin to explore alternate paradigms that may better explain the emotional lives of physicians within the medical education literature.

Conclusions

Current literature examining how students experience emotion in the clinical settings of the third year of medical school is lacking. To address the gap in scholarly literature, my study

examined how medical students experience, respond to, and uncover meaning related to their emotions in the clinical settings of medical school. My investigation utilized a phenomenological methodology to identify thematic manifestations of my phenomenon of interest. I interviewed 12 medical students through purposeful sampling. My findings revealed three themes relating to emotions as a pop-up storm, emotions as a state of becoming, and emotions as situated for students in the third-year clinical settings of medical school. A conceptual framework based on my research findings is displayed in Figure 2. The thematic manifestations of the phenomenon of emotions in the clinical years of medical school have been used to both establish how medical students experience emotion in clinical settings, as well as contribute to existing literature on medical student emotionality in medical school.

APPENDIX

APPENDIX A

Interview Protocol for Participating in Study

1. Can you please describe as detailed as possible a situation in which you experienced a strong emotion within the clinical setting and what that was like?
    a. Clarification will be provided if needed, giving examples such as anger, grief, joy, or feelings of inadequacy.
2. How do you know when you are experiencing this emotion?
3. Did these feelings influence your behavior in the clinical setting?
4. Did the clinical setting in which you were situated affect how you experienced these emotions? If so how?
5. How did this experience impact you as a medical student?
6. How important would you say your own emotions are in your work?
7. What other types of emotions do you experience? What kind of impact do these have on you?
8. Do you believe your profession allows for free expression of your emotions?
9. What happens if you suppress these emotions? What are your outlets?
10. Anything else you might want me to know?

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