

When the Healer Needs Healing:

A Study of Medical School Students and How Universities Answer the Call for Wellbeing

Christiana D. Maier

Hamline University

Dissertation Chair: Dr. Jennifer Carlson, Ph.D.

Reader: Dr. Vivian Johnson, Ph.D.

Reader: Dr. Corbin Smyth, Ed.D.

Abstract

Burnout and anxiety among medical school students is prevalent and recognized by experts in both the medical and educational setting. This research project aims to answer a primary research question: *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* as well as secondary research questions that include *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?* And, *What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?*

The research methods include a secondary analysis of a 2016 - 2019 survey created by medical school administrators for students to complete. The response outcome from the survey are included in this study as well as a series of qualitative interviews with current medical school students. The interviews were transcribed and analyzed to reveal a deeper understanding of the student experience. The key findings included a need to streamline administrative processes as well as curricular changes where self care and stress management are emphasized during the pursuit of a medical degree. These key findings led to recommendations where faculty and administrative leaders could implement topics about how to handle stress into the current curriculum. This study also notes that the recommendations are applicable and appropriate for organizational leaders whether they are in the field of education or otherwise.

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CHAPTER ONE

Introduction to the Study

Many medical school students are exhausted from the rigors of medical school and it can follow into their careers as practicing physicians. In fact, “burnout and stress are serious concerns because, as research shows, these lead to a decline in quality of care and increased substance abuse, divorce, and even suicide,” (Drolet & Rogers, p. 103).

While the research by Drolet and Rogers examines how exhaustion and stress affect the medical school student population, this research project aims to answer a primary research question: *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* While it is important to learn and explore how students describe their wellbeing, it is also important to answer secondary research questions that include *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?* And, *What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?*

The primary and secondary research questions explore how burnout and stress might manifest. It is possible that since medical school students attend lectures and they study for hours at a time, they also attempt to balance home life in the pursuit of healing others. “Moreover, many students, residents, and physicians at all levels of practice experience burnout and ‘compassion fatigue,’ losing sight of altruism and empathy under the stress of medical school and modern medical practice,” (Drolet and Rogers, p. 103). Jennings (2009) also notes that the medical school system emphasizes detachment and

the experience should not be seen as a “rite of passage” (p. 254). He further states that medical schools teach students how to value patient life and heal the sick but students are disoriented by the stress and anxiety of the academic experience. At the end of the day, I wonder who is healing the healer? Who is teaching the healer how to manage their personal life balance and wellbeing?

According to numerous sources discussed throughout this chapter and in Chapter Two, medical school students are considered high risk for depression and suicide ideation because of the percentage of students exhibiting depression and anxiety among other mood disorders. The research has revealed that not only is this happening during their academic years but also well into their careers as doctors. For those of us who work in medical schools, this reality is apparent. In fact, during the years of 2016-2019, administrators at a Minnesota medical school conducted a survey after the suicidal loss of two students on separate occasions. They sent the survey to current students each year during that time frame. The administrators and staff who created the survey recognized the need to understand how students would self-report their wellbeing. The goal was to have the responses from the 2016 - 2019 surveys to reveal how faculty and staff might improve programming to encourage life-balance and wellbeing. A discussion of this survey and its results are included in this study.

Wellbeing in general. Although this study focuses on medical school students, wellbeing is a term that applies to all walks of life. It is important to note that for this study, the term wellbeing is not specific to medical school students but rather, a general definition to guide the discussion. According to Stanton, et al. (2016), wellbeing is

defined as ” (p. 97). This study aims to explore how medical school students experience wellbeing while attending medical school.

Primary research question. Since wellbeing is defined as “interconnected and multidirectional,” it is important to answer the question: *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?*

Secondary research questions. It is also important to learn about the elements that lead to burnout in medical school students and what burnout looks like and feels like when experienced during their academic years as this is the opposite of a state of wellbeing. In conjunction with this, the research attempts to reveal what students believe is helpful in the current medical school programming that supports student wellbeing. Therefore, the secondary research questions include, *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?* And, *What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?*

Origin of Current Research Questions

In December 2012, my oldest brother committed suicide. The journey of this loss and the overwhelming grief eventually turned into hope and peace but it took some time as well as a proactive approach on my part. Part of my proactive approach was to support wellbeing with the students in the program where I worked. With this goal in mind, while enrolled in my doctorate program, I met with one of my professors and we talked about an independent study where I would create an undergraduate class that focused on how to achieve happiness while also teaching how to deal with life challenges. I knew in my gut,

and intellectually, that it was time to turn grief into something practical and helpful for others.

Over a few summer months, I researched, wrote, and created the course: “Happiness 101” and taught the course in 2018 where it completely flopped. The students who signed up for the class thought that they would receive a list of 10 items on how to “get happy.” My approach was more philosophical; choose your own adventure on how to find and hold on to happiness. After the course ended, I deepened my research and rewrote the curriculum based on the class feedback. The class became “Wellbeing in College” and was incredibly successful based on survey responses from the students when the course concluded.

Even though I teach undergraduate classes, sharing this backstory helps to explain why I eventually chose to pursue this research topic. My prior experience is deeply connected to this study which focuses on the wellbeing and health of others. In addition to my prior experience, my professional life as a staff person at the university medical school where my work includes connecting students with alumni physicians influenced the selection of my research participants. I chose medical school students as the main focus of this dissertation because I have worked at the medical school since 2017, and I noted that physician burnout is a consistent topic. At the same time, I spoke with medical school professors and leaders about how medical school students are anxious and stressed. These details are also connected during the time when I taught undergraduate courses about wellbeing. The gears started to connect and the wheels started turning toward the study of the medical school student population especially after learning that medical schools lose some students to suicide and substance abuse.

While planning this research agenda, I noticed that focusing on prior experiences and feedback from students had helped me shape a stronger curriculum that supported them to pursue wellbeing. For example, every semester undergraduate students are asked to fill out an anonymous online university survey. The survey questions include if the undergraduate course helped them, if the instructor was available outside of classroom hours, and a variety of additional questions to ascertain the usefulness of the course. In 2019, the responses for my wellbeing course revealed that students felt that the course supported them during the difficult transition into college. Students communicated that they realized more about themselves and how they relate to their university. The direct quotations from six out of 25 anonymous evaluations conducted at the end of the 2019 fall semester are included as examples of insights students shared about the course. As students shared their insights about the course, their feedback inspired me to create this dissertation study, especially the comments where they learned about things that were not in a textbook. I hope to discover what programs are in place for medical school students that may support them too. A few of the positive responses from my teaching "Wellbeing in College" are illustrated in Table 1.

Table 1

Fall 2019 Student Evaluation Excerpts

| What does your instructor do especially well? | What could the instructor do to improve his/her teaching? |
|--|--|
| “The way she cares, her class she makes it about us, the students. She teaches what no textbook can. She has meaning behind every single of her words. Very impacting.” | “Too much time spent on values we already know like kindness and compassion.” |
| “She is exceptional at creating an open environment free of judgment and providing her students with a place to talk about anything they need to.” | “Include more about stress relievers.” |
| “From the first day of class I felt like she cared about us each as an individual and she shaped the class around our needs and wellbeing. She is truly one of the best professors I’ve ever had.” | “Talk about more issues that freshmen are going through and not so much about kindness.” |

As noted in Table 1, students appreciated an open and safe environment to discuss their perspectives and to ask their questions. The students also noted that improvements were needed to create a better class in the future. It is my goal that this research project might garner similar results where I will learn more about medical school students and what might improve their academic experiences. The following section explores commonalities among medical schools in the United States, specific researchers who have studied how medical schools are organized including the curriculum, and how this research project is informed by these details.

Academic and Personal Landscape

In general, medical schools prepare students for future professions in medicine by providing them with the knowledge and scientific foundation that they will need to

succeed as physicians. The learning foundation includes on-site clinical rotations where medical school students shadow practicing medical doctors; learning the trade and living the trade long before graduation. Throughout the United States, medical degrees include four years of schooling, ensuring that students are well-versed in medical knowledge by the time they graduate. However, following graduation, they take on residential programming, which means they are not fully practicing on their own. For the most part, students continue to shadow and learn from experts in the field through their residency. The residency system includes students applying to hospitals and clinics who may either accept or reject their applications.

In the United States, medical schools set aside April 20th and celebrate what is called Match Day. On an annual basis, this is when medical school students learn which institution has invited them to learn how to serve as a resident. It is an exciting, anxiety-producing day to find out where they will go. Since every medical school in the nation follows the same sequence where students earn a degree in four years and then go into a residency, it can be surmised that medical school students have the book knowledge and clinical experience needed to succeed. The real question, however, is if universities are preparing medical school students with the skills and understanding on how to handle stress, anxiety, and depression on an individual level for themselves.

Although my research will focus on medical school student wellbeing, Dyrbye (2006) notes that there has been a rise in medical school administrators understanding and acknowledging that student burnout and depression is prevalent. During the past decade, the realization that students are experiencing burnout and have experienced it well before their medical degree is completed is an important topic to address, and

Dyrbye suggests that a proactive approach is necessary. The percentages of students experiencing high levels of anxiety and depression is fairly high in medical schools; for example, at the University of Pittsburgh School of Medicine, one study revealed that “about 20% of [their] medical students have been reported to screen positive for depression” (Wolf & Rosenstock, 2016, p. 174). In comparison, a similar report in 2016 was released that included national and multi-institutional data collected between 1990 and 2015. In this study it was reported that between “35 - 45% of medical students had high emotional exhaustion, 26 - 28% had high depersonalization and 45 - 56% had symptoms suggestive of burnout” (Dyrbye & Shanafelt, 2006, pp. 132-133). In fact, the number is so alarming Elias, 2020 described how universities are creating new administrative positions that include psychiatrists who will serve as faculty in support of medical school students.

Although there are changes occurring in medical schools across the nation, Dyrbye and Shanafelt (2006) state that the progress was considered slow at the beginning of the 21st century. Currently, the discussion and implementation of curricula that focuses on wellbeing has improved. Medical school faculty and administration are consciously making the effort to connect with students before they experience burnout (American Medical Association, 2019). The gradual change to the curriculum included the ideology that if students do not know how to conduct self-care, universities can provide the tools on how to establish wellbeing. According to Ishak (2013), medical schools could be a key contributor in teaching students how to achieve and maintain wellbeing before they experience burnout with a goal to proactively support students before burnout might occur.

Personal connection. As the researcher for this project, the conceptual framework of my approach is based on my experience working with medical school students where they are challenged with doing their best 24-7. Students at the medical school where I work are often studying at tables on campus by 5:00 am and those same students are still studying at 6:00 pm. Maxwell (2013) emphasizes that researchers need to consider where they are within the framework when they create their study. In this case, I have direct experience observing students in the medical school while also engaging with them as a staff leader.

As I began thinking about this project, I learned about a survey that was sent to medical school students at the campus where I work. The survey was administered by staff and sent to current medical school students on the campus from 2016 - 2019 to reveal each medical school class and their perspectives on their wellbeing. Although the survey responses may help with understanding current students, it will also be beneficial to interview current medical school students to learn about their personal experiences.

Potential Significance and Outcomes of the Research

The strong drive behind this research is a desire to discover what one specific medical school is doing to support student wellbeing. The research includes a close examination of issues of burnout at other medical schools to inform the research design and analysis of the results. The research aims to have medical students explain what it means to them to burnout from the rigors of studying medicine. The research also aims to explore student perspectives about the high rates of anxiety and depression. The literature review includes a broad view of medical schools in general but the research context

narrows to a smaller medical school specializing in family medicine and indigenous community health.

The importance of this study is two-fold. First, it is important to understand in what ways medical school students are considered high risk when it comes to wellbeing and life balance, as IsHak et al., (2013) note that “with major US multi-institutional studies estimating that at least half of all medical school students may be affected by burnout during their medical education” (p. 242). Second, by understanding the reasons medical school students are thought of as high risk, the research explores what might lead to burnout. This exploration could help pave the foundation for students to know what burnout is and why it happens. By teaching them this during medical school, it could help them as future physicians. According to Jennings (2009), leaders must consider ways to remedy the current educational model based on statistics of student burnout. While it might seem intimidating to alter long-held medical school traditions and programming, the research of Jennings (2009), Ishak et al., (2013), Dyrbye (2006) and others are shedding light on how important it is for administrators to consider additional ways to support medical school students. In fact, a key recommendation from Jennings (2009) is how imperative it is that leaders of medical institutions consciously make an effort to improve the learning climate. When considering that practicing physicians are called upon to care and empathize with ailing patients, we need to consider how they begin their profession. As Jennings describes it, medical school students cannot arrive at their practice, fresh out of residency, “broken, morally and emotionally, by the training process that makes them our physicians” (p. 264) as it will negatively impact patient outcomes. As Jennings (2009), Ishak et al., (2013), Dyrbye (2006) and others have shared through

their research, additional studies would continue to reveal the current medical school student experience and how leaders might improve the learning environment.

While the significance of this research includes exploring the why and how burnout occurs, two potential outcomes of this study are: one, the results could provide details that inspire faculty and administrators in medical schools to consider their programming. And, two, the study results may also reveal if the curriculum includes topics about practicing self-care and wellbeing which might also contribute to the discussion that is already taking place in medical schools and in current research that seeks to answer the call for medical school student wellbeing.

Summary

My primary goal with this research is to contribute to current conversations about medical school student wellbeing. By turning back to my own experiences, I am aware of what can happen when someone does not receive help. On a rainy Tuesday in 2013, the call came that shattered my understanding of wellbeing. My oldest brother, who was my best friend growing up, was dead. I struggled from the shock of the news. He was an instructor in a private school in South America. He loved his work and enjoyed a good life, as far as his siblings could tell. He was an intelligent and complex man who had dealt with past hardship and, as his younger sister, I thought he was doing well. When my little brother called me to share the news of his death, and later learned it was by his own hand, the entire world changed for me. For the first time in my life, it became clear that people can live whole lives bent under the strain of life choices without any sign until it is too late.

While this understanding felt too late, too little, and too overwhelming to fully accept while grieving, pieces of it began emerging in my professional work. As my career

shifted to working at the medical school there was talk about physician burnout and also reports about medical school students facing similar challenges. I was inspired to dig into something tangible because the death of my brother was still a mystery and the heaviest part was always wondering why it had happened. There were times when my grief dragged me down and it was difficult to move through the emotions. I reached a point, however, when it was time to let it go which then led to teaching about happiness and then developing the initial curriculum into a class about wellbeing. The more experience I gained teaching undergraduates, the more important it was for me to also help students pursuing a medical degree, especially because student and physician burnout was a commonly accepted part of the educational journey.

While my motivation for this study was inspired by teaching undergraduate courses, I am curious about what the 2016 - 2019 survey reveals about the mindset of our medical school students. It will be beneficial to know how students are doing and if programming is helping or hindering their future success as physicians. The 2016 - 2019 survey results will shine a light on this mystery and in-person interviews will deepen my understanding of how our medical school might better support the very professionals called on to heal the sick. As a researcher it makes sense to me that if our medical school students learn how to manage their wellbeing, can they also use those skills as practicing physicians? And, with those skills, might they have a better life or at least know what to do when things fall apart? The deeper understanding from this study may also inform other medical schools in supporting the emotional wellbeing of their students now and when they are practicing physicians.

Throughout this chapter, the primary and secondary research questions have been briefly explored and introduced as the main focus for this study. There are also a variety of sources mentioned that support the examination of burnout and wellbeing that takes place among medical school students. While the research questions and sources have been proposed, I have also shared the personal experiences that led to my curiosity and compassion for this study. In Chapter Two, numerous sources and researchers continue to tell the story about a nationwide concern for the wellbeing of our future physicians. Chapter Three explores the research design with experts cited who support the selected research process followed by Chapter Four where the results of the study are examined. For the conclusion, Chapter Five delves into the meaning of the findings while describing commonalities and potential answers to the research questions. Chapter Five also includes the limitations and recommendations that were revealed through the findings. While this study is organized into tangible, linear chapters, the journey to obtain the data was far from straightforward. The discovery of a more robust story unfolded through the research of experts and the voices of current medical students.

CHAPTER TWO

Literature Review

Explanation of Literature Review Structure

Chapter One introduced the primary research question: *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* Chapter One also introduced the secondary questions: *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout? And, What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?* Chapter One then revealed both the personal and professional experiences that led to a desire to research medical school student wellbeing. The researcher deliberately chose a format and voice that is similar to a mosaic where the pieces brought together as a whole create a complete picture. This literature review is designed based on a similar integrative approach; a conscientious decision to address the research holistically while synthesizing literature that has thoroughly examined the topic (Torraco, 2005).

The integrative literature review aims to provide a new perspective, “despite the fact that the review summarizes previous research,” (p. 362). In order to achieve this successfully, the common thread for this review is the concept of wellbeing and how it is defined, related, and considered in U.S. medical schools based on current and past research about the topic. At the same time, this holistic platform invites the “provocativeness or fruitfulness of an integrative literature review to generate new ideas and directions in the field” (Torraco, p. 364).

In order to achieve a successful integrative approach, the common thread throughout this study is the wellbeing of medical school students. Throughout this chapter, the main topic for each section defines specific attributes about medical school student wellbeing. These specific pieces tie into the subsequent pieces; forming a complete blanket of researched material from a variety of experts and studies. An integrative approach with academic voice makes it possible to support exact details while considering the common theme when discussing the holistic nature of wellbeing for medical school students.

An Examination of the Medical School Structure to Understand Wellbeing

While the inspiration to conduct research about medical school student wellbeing began with personal trauma, teaching undergraduate classes about student success and mental health has been a large part of the motivation as well. As a staff person also working with medical school students and alumni, the topic is timely and important considering the ways in which the 2021 - 2022 COVID 19 pandemic has altered the landscape of self-care.

Across the nation, the medical school degree schedule is fairly similar among over 130 medical schools in the United States (What to Expect in Medical School, n.d.). It is important to understand the overall structure of our nation's medical school system in order to comprehend what might lead to student burnout or what might result in physician burnout once students become practicing medical doctors. The term "structure" refers to the number of years before matriculation and the general expectations for each year.

For instance, the first two years in medical school focuses on classroom lectures and hands-on lab experience where students learn additional details about anatomy,

biology, and numerous medical topics including courses that emphasize the sciences and how to interview and examine patients. The third and fourth year students participate in hospital and clinical rotations by shadowing medical doctors. Medical school includes time when students also learn “basic medical procedures along with any tasks” (What to Expect in Medical School, n.d.) that are specific to the specialty or focus of the medical institution in which they are participating during their last two years of medical school. Medical schools differ in that they have unique missions, and there is potential for instructional variety where faculty might encourage hands-on learning over textbooks and lectures. In other words, “no two schools are exactly alike. Each offers its own academic focus, teaching methods and research opportunities” (What to Expect in Medical School, n.d, para. 1). Once students graduate after completing four years of medical school, they have earned their Medical Degree (M.D.). However, they will have to pass a board exam and “spend between three and seven years as a resident in a teaching hospital” (What to Expect in Medical School, n.d., para. 11). When they have accomplished this final stage, they are fully trained and considered capable of treating patients as practicing physicians. However, Dyrbye (2006) describes how it is concerning that current trends reveal that the high rate of burnout and the reports of decreased wellbeing are echoed around the country from medical students and medical doctors alike.

Higher education researchers, such as Kern-Bowen and Gardner, (2010), who have studied master and doctorate level student retention have noted that the academic and social connection is imperative for students to establish a sense of wellbeing. During the medical school four-year experience, another researcher Dyrbye (2006) discovered that students who self-report anxiety and depression also reported that they did not feel

connected to their academic community. The variables that led to a disconnect included the curriculum and the encouragement to remain detached in order to make sound medical decisions. These elements increased their likelihood to experience depression and anxiety (Dyrbye, 2006).

Burnout: What It Means Among the Experts

To begin, the literature review attempts to define the term “burnout” in general terms as well as what it means for medical school students. By building a foundation that clarifies common terms used throughout this review, this section of the research narrative prepares the reader to clearly understand the verbiage used by experts in the field. Second, the literature review explores the reasons leaders should care about this topic while investigating a variety of current statistics that support the assumption that the rigors of medical school do lead to anxiety and depression. The third segment assesses what it means to have wellbeing in the medical school setting. Finally, the literature review concludes with a thorough examination of current programming that is recognized as helpful for increasing wellbeing while pursuing a medical degree. In the following section, the definition of burnout is explored including current research that supports what it can feel like and look like for medical school students to experience burnout.

Research Based Definition of Burnout

Although most people may have heard of “burnout,” it is important to define its meaning in general terms. Maslach and Leiter (2010) describe the word as follows:

Burnout is a psychological syndrome emerging as a prolonged response to chronic interpersonal stressors on the job. The three key dimensions of this response are overwhelming exhaustion, feelings of cynicism and

detachment from the job, and a sense of ineffectiveness and lack of accomplishment. (p. 103)

While the general definition clarifies how burnout is expressed for people in the workplace, it is important to consider it through the lens of medical school and of practicing physicians. The research of Dybrye's et al. (2006) is a first step in this process where the researchers conducted surveys in 2004 that included three medical schools in Minnesota with a total of 545 student respondents out of 1,087 who were contacted to complete the survey. The survey asked current medical school students to self-report on the past 12 months of their life and the questions included a focus on burnout and quality of life, among others. Prior to this survey, the authors noted that they could not find any previous studies of this kind. However, during the course of this review of the research, there were significant literature references to other studies. The studies included publications that highlighted similar findings after Dybrye's analysis. For this literature review, the publications appeared in print from 2004 - 2017. The researchers added to the definition of "burnout" and therefore it deepened the knowledge about the medical school experience.

Major Findings 2004-2017 Research Studies: Burnout in Medical School Students

The publications including the descriptions and statistics that were discovered by the researchers are included in Table 2 for a clear review of their findings.

Table 2

Medical School Burnout Defined

| Author | Findings |
|--|--|
| Dyrbye et al. (2006) pp. 374-375 | 545 students self-reported that the majority of their depression also related to personal life events that made it difficult for them to be completely present when helping patients. Survey results concluded that emotional exhaustion is one component of what it means to experience burnout. The authors agreed that burnout encompasses depersonalization and a low sense of personal accomplishment. 45% of the students in the three medical schools were experiencing burnout. Additional results revealed that the prevalence of burnout seemed to occur during the first and second years of medical school mainly due to a lack of faculty support. |
| Jennings (2009) pp. 255-257 | Added to the definition that burnout includes a decreased sense of worth and it is perceived as an inevitable part of education and training that occurs for nearly half of the medical school student population in the nation. The author also noted that burnout is really about unmet needs including a lack of resources, support, and fair treatment; a sense of meaninglessness and lack of motivation because students begin to believe that they are not fulfilling their true worth. Suicide ideation is included in the ways burnout is defined in medical school students. Students also reported that they felt inadequate and underprepared for the rigors of clinical rotations mainly because they felt that they could not do everything possible to save lives, treat diseases, or handle the complete circle of patient care. |
| Ishak (2013) pp. 242-244 | "Burnout is a state of mental and physical exhaustion related to work or care-giving activities" and nearly half of all students experience it. The authors noted that there are "concerning implications for the continuation of burnout into residency and beyond." These symptoms include "increased stress, reduced confidence and experience...emotional exhaustion, depersonalization, and a decreased sense of accomplishment." The burnout rate in the third and fourth year pointed to clinical experiences that included negative resident leaders. Data points toward a connection between burnout and thinking about suicide. In fact, "students experiencing burnout were two to |
| Nam (2019) para. 6 | 11% of students experienced suicidal ideation with over one-fourth experiencing depression, according to a 2016 study with more than 100,000 medical school students. Burnout tends to occur because not only are students tasked with taking care of patients during their clinical experiences but they also have limited authority. They go through all the same processes as a practicing physician but they cannot make decisions on the best treatment or even the diagnosis itself. |

The studies that the researchers either conducted or analyzed helped them gain more depth of understanding that enabled them to further describe the behaviors and

responses that are linked with the term “burnout.” Overall, the researchers in Table 2 agree that burnout does occur and burnout is defined as specific behaviors and responses including emotional exhaustion (Dyrbye, 2006), unmet needs, decreased sense of worth (Jennings, 2009), and suicide ideation (Jennings, 2009; Ishak, 2013; & Nam, 2019). In contrast to Maslach and Leiter (2010), burnout for professionals in the workplace did not include suicide ideation whereas for medical students, it was an indicator of burnout (Jennings, 2009; Ishak, 2013; & Nam, 2019).

Table 2 also illustrates that three of the researchers agree that burnout and anxiety are most prevalent in year one and two of medical school and that nearly half of all medical school students report experiencing it (Dyrbye, 2006; Jennings, 2009; & Ishak, 2013). On the other hand, Nam’s (2019) research concluded that burnout occurs in year three and four. This disparity occurs because Nam studied students who were experiencing clinical rotations in their last two years. Dyrbye (2006), Jennings (2009), and Ishak (2013) focused on responses from the first two years of medical school. While the researchers might not agree on which set of years burnout occurs the most, it happens and not only are medical school students aware of it, they are willing to report it in their survey responses. This compelling piece of evidence is highlighted in Table 2 where each researcher notes that students willingly self-reported emotional distress during their medical school experience.

According to the descriptions in Table 2, the term “burnout” in medical school includes a variety of components that can lead to depression, anxiety, and potential suicide ideation. The outcome of the researchers’ findings and analyses points toward similar emotional and physical states of being that define burnout: depersonalization,

exhaustion, decreased sense of worth, and suicide ideation. As mentioned at the beginning of this chapter, the survey analysis of 545 students (Dyrby, 2006) from three medical schools exposed the reality that 45% of the students reported dealing with burnout.

Table 2 reveals that while Jennings (2009) focused on the correlation between burnout and a lack of resources, Ishak (2013) found that during the third and fourth years, students experienced negative leadership that led to the students reporting a high rate of burnout. The overwhelming pressure to care and treat patients without the autonomy of a medical degree was a discovery that Nam realized in a 2016 study with over 100,000 medical school students reporting this phenomenon. In 2019, Nam shared his findings that explored the possibility that students have limited authority while tending to patients with all the same processes as a medical doctor but without the ability to make decisions or diagnose the patients. Based on this research, the term burnout is defined as specific behaviors and responses that include suicide ideation, exhaustion, decreased sense of worth, and unmet needs (Table 2).

Research Findings: Potential Negative Outcomes Related to Experiencing Burnout

Even though the researchers agreed that burnout occurred among medical school students, a deeper dive into the negative outcomes revealed details about students who experienced burnout while pursuing their medical degree and what it could mean for their future practice. Ishak et al. (2013) noted that there are “concerning implications for the continuation of burnout into residency and beyond” (p. 242) with Jennings (2009) who balances the equation by citing how students who learn to be detached potentially become physicians who are detached. As described earlier, students reported through a

variety of surveys in different years by different researchers (Dyrbye et al., 2006; Jennings, 2009; Ishak, 2013; & Nam, 2019) that their self-care was undermined by academic pressure and the need to embrace detachment as a means to serve their patients. When detachment occurs on a personal level, “it can have significant consequences, such as impaired access to self-knowledge, self-confidence, personal growth, ethical decision making, and compassion for patients” (Jennings, 2009, p. 261). Jennings argued that students can, unfortunately, harm patients if they reach a state of burnout preceded by detachment. This can occur simply by medical students finding themselves unable to look past their own mistakes and to potentially stop caring about the patients as human beings and to see them simply as a disease and diagnosis (Jennings, 2009).

Jennings also discussed how medical schools tend to prepare students to have a sense of detachment when having to make challenging decisions for their patients. The premise for this detachment preparation is for the doctors to make practical decisions based on their knowledge and not their emotions or how they feel about their patients. This detachment can often correlate with the student themselves and the characteristics of this correlation include medical school students reporting that they felt they had “lost their sense of humanity” (Jennings, 2009, p. 260). According to Jennings, the current medical school system does not necessarily encourage burnout but it certainly creates an environment where detachment may lead to burnout and “is not a benign rite of passage but a painful and disorienting experience with serious potential consequences for a student’s health, professionalism, and patient care” (p. 254).

Based on Jennings’ (2009) revelation that students who experience burnout potentially become physicians who burnout, it is important to note the obvious: the

medical school experience is demanding. If administrators are aware and willing to make changes to improve student wellbeing, “it could encourage a generation of doctors to not only transmit information to their patients on the importance of maintaining wellness as part of a healthy lifestyle, but also to actually exemplify it” (Ishak et al., 2013, p. 245).

The authors also suggested that practicing physicians who learned wellbeing skills in medical school later became ideal mentors for current medical school students.

Physicians practiced wellbeing skills like taking breaks as a normal part of their daily routine. Medical school students witnessed this behavior and had the opportunity to emulate similar decisions throughout their daily experiences. This was especially true when the physicians worked directly with recent graduates who were immersed in the residency experience where burnout is typically prevalent (Ishak et al., 2013). Jennings (2009) concluded that medical schools have “a responsibility to make student wellbeing an important educational priority” (pp. 254 - 261) and to scrutinize a curriculum that absolutely prepares a scientific mind but unfortunately, fails to embrace the human condition of the physician.

Medical School Students Define Wellbeing

When considering the human condition (Jennings, 2009), it is imperative to understand that while burnout occurs, wellbeing is also a part of life and also a part of physician and medical school student experiences. According to Drolet (2010) there are four aspects that include the “physical, psychological, social, and environmental” (p. 107) that define “wellness” or, as for the purpose of this study, “wellbeing”. For example, the environmental experience includes the physical classroom and lab space where the students learn (Drolet, 2010).

The student experience in the physical space as described by Drolet aligns with Dyrbre (2009) where “more than three-quarters of the students were satisfied with the overall learning environment at their medical school” (p. 276). In other words, the physical classroom or lab. These same students reported a lower rate of stress and anxiety. The correlation between positive experiences with the environment (the classroom or lab) and a sense of wellbeing is important to consider when defining the term “wellbeing” (Dyrbye, 2009). It is important to understand in which ways students experienced wellbeing in order to define the term for this study.

Drolet (2010) discovered that the students’ sense of wellbeing included interaction with their environment while Barrett (2014) reports that undergraduate students reflect a similar like-mindedness where “the physical environment plays a role in the experience and personal growth and development of college students on campus,” (p. 24). Drolet elaborates that the psychological outcome of that interaction has a big impact on students. Drolet clarifies that students report wellbeing through positive social interactions with each other as well as with medical school faculty.

In connection with the physical, psychological, social, and environmental aspects mentioned by Drolet (2010), research by Pagnin and de Queiroz (2015) helped them understand factors that created a sense of wellbeing in medical school students. According to their findings, wellbeing and what it means to each person is influenced “by culture, value systems, and stressful environments” (p. 1). This aligns with Dyrbye (2012) who recognized the potential for different value systems that create a subjective point of view when defining what it means to have wellbeing. In fact, Dyrbye states that culture influences how a person perceives wellbeing as well as how they communicate

whether or not they are doing well. Dyrbye found in his research that the majority of cultures view wellbeing as “having positive feelings and positive functioning in life” (p. 1024).

Interaction Between Wellbeing and Medical School Environments

Although Ishak (2013), Jennings (2009), Drolet (2010), and others supplemented the original work of Dyrbye (2012) which expanded the definition and understanding of burnout among medical school students, the researchers also built a platform that focused on how wellbeing could be a part of the medical school environment. By understanding the factors that lead medical school students to feel a strong sense of wellbeing, medical schools can potentially create environments, social interactions, and positive psychological outcomes that encourage the aspects that students report as increasing their sense of wellbeing (Pagnin & de Queiroz, 2015). Pagnin and de Queiroz also note that medical school students had a stronger sense of wellbeing when they did well with their studies and students reported a better “self-esteem, positive feelings, personal health, and learning ability” (pp. 4-5) when they excelled academically. On the other hand, if they experience a great deal of stress, lack of sleep, and the inability to manage a difficult learning environment, students may not excel academically and eventually experience burnout at a higher rate because they feel that they are failing to reach their full potential (Pagnin & de Queiroz).

While Drolet (2010) and Pagnin and de Queiroz’s (2015) research focused on certain aspects that define wellbeing and what it means for medical school students to burnout, additional evidence suggests that “decreased life satisfaction, serious thoughts of dropping out and suicidal ideation” (Fares, 2016, p. 78) were also key factors when

students defined themselves as experiencing burnout. Dunn et al. (2008) warned that when optimism dissolves and students realize they no longer have empathy, burnout is typically right around the corner. What could mitigate burnout, what might relieve students of stress and lead them to report a sense of wellbeing, is found in the above-mentioned research (Drolet, 2010; Dyrbre, 2009; Jennings, 2009; Fares, 2016; Pagnin & Queiroz, 2015). The research encapsulates the need for a revised curriculum and medical school leadership who hear and heed the warning that students are experiencing burnout and could benefit from learning how to improve their wellbeing.

While the interaction between medical school students and the school environment is noted as a possible way to improve wellbeing, Jennings (2009) continued to examine how “a student disconnected from himself can care as effectively for his patients?” (p. 262). According to the study that Jennings analyzed, students cannot care for patients as effectively as they could if they had a sense of their own wellbeing instead of varying degrees of burnout. The author also stated that medical schools can and should do something about it. This also applies to curricular factors where the research referenced throughout this chapter clarifies that certain elements determine which curricular components lead to medical school student burnout.

Fragerman et al. (2019) discovered that “the main factors contributing to burnout in medical students include the curriculum with stress related to the competition, the exams or the cost of the studies” (p. 40). Dunn (2008) notes that administrators consider changing certain factors in the academic setting. One such solution that Nam (2019) studied was the potential for removing letter grades and replacing them with a pass-fail system during their first two years. At the same time, if third and fourth year students

needed to attend appointments that focused on their physical or mental health, excused absences could be guaranteed without adding to the student's academic burden. Nam's findings recommended a close look at a new support option where students could receive free counseling with a clinical psychologist.

In order to clarify the curricular factors that could lead to burnout, Dunn (2008) discussed the speed at which medical students had to learn incredible amounts of memorized material while balancing life demands leading to student burnout. Among the variables that led to burnout, he noted "Students spend many hours in lectures, labs, review sessions, and independent study. Many students consequently spend less time in health-promoting activities, such as exercising and socializing" (p. 46). Dunn suggests that administrators and staff involved with advising structures encourage students to consciously make an effort to maintain wellbeing while utilizing wellness programs if they are offered through the medical school they are attending. While medical school leaders have an important role in the development of curriculum and programming, there are current universities answering the call for change.

Appreciative Inquiry Can Support Student Wellbeing

Based on changes in curriculum at Indiana University School of Medicine, Jennings (2009) noted that they have implemented "appreciative inquiry" that focuses on conversations, self reflective writing, and encouraging medical students to share their personal journey verbally and in written form. In other words, this university has chosen to intentionally strategize the inclusion of what is currently termed as "medical humanities" (Jennings, 2009, pp. 263-264). This kind of programming has the potential to deepen self-understanding and possibly lead to greater depths of empathy; the term

empathy illustrates the core of physician care where they can understand and share with how another person feels. A physician with a high level of empathy is a physician who can help patients with the reason they seek care and to also impart a feeling that they matter. In order to solve the burnout issue, the medical humanities program gave medical school students the opportunity to talk about their challenges but to also hear about the challenges of others (Jennings, 2009).

Research conducted by Thomas et al. (2006) further clarifies that “both positive and negative aspects of personal health appear to relate to physicians’ compassion, suggesting that efforts to reduce distress should be part of broader efforts to promote wellbeing if peak competency is to be achieved” (p. 181). Based on the research review for this dissertation, it may therefore be concluded that current medical school students need to learn methods of how to handle stress and anxiety. A conclusion may also be drawn that it is important that students are aware that burnout can occur and that it could decrease their empathy and compassion for their patients. Without a high level of empathy and compassion, there is a loss of connection with the patients and the potential for less capable care (Jennings, 2009). While understanding that burnout could decrease patient care, what kind of specialized programming would support an increase in empathy and compassion? The following section explores potential solutions for medical school leaders who are concerned about the wellbeing of their current students.

Attributes of Specialized Programs to Support Student Wellbeing

As noted early in this literature review, Dyrbre (2006) revealed that the 2004 survey results suggested that programming should include clear instructions on where students might go in order to receive help, and it should focus on communicating with

students that life has many challenges after graduation, after residency, and even after 20 years as a practicing physician. He also noted that the history of medical schools illustrates that these discussions were not commonplace in the past. According to Dyrbre, the idea of discussing how hard life is and how to balance it as a medical school student may still be a new concept for many medical institutions. It may be concluded that faculty should teach the skills that give medical students an idea on how to assess themselves; giving them a personal check in on whether or not they are heading toward burnout. Dyrbre noted that additional studies are needed in order to identify “what curricular factors contribute to student burnout so they may be addressed” (p. 381). Thomas et al. (2006) agreed with this sentiment that “based on the decline in empathy through the course of medical school in several single-institution studies, a number of investigators have hypothesized the training curriculum itself may lead to or contribute to this erosion” (p. 177).

Role of Self-Care in Supporting Learner Wellbeing

While Dyrbye and Thomas et al. (2006) agree there are curricular factors that can lead to burnout, the researchers also consider how medical schools could provide curriculum and programming that focus on wellbeing. In this way, students could take an active role by learning what it means to have wellbeing when they learn from faculty how to initiate and continue self-care. When students learn about self-care, they are more likely to understand when they are beginning to head down a path toward burnout (Jennings, 2009). One recommendation for medical school programming is to integrate topics about self-care into the existing curriculum (Ishak et al., 2013). At the same time,

research shows that medical schools should encourage students to be aware of burnout symptoms and what can lead to it.

If medical students can learn ways to cope with stress and anxiety, they might become better able to do so as practicing physicians (Ishak et al., 2013). In order to do this, however, medical students need to learn how and they need to see practicing physicians use similar self-care tools and personal awareness. Modeling and frank conversations about how to do this through real practice and simulations may promote recovery from burnout. The data suggests that 26.8% of students were able to recover from self-reported burnout and continue with their pursuits in medical school (Ishak, 2013). How was this possible?

According to Ishak (2013), medical schools are the perfect environment to create programming that teaches students about wellbeing and to recognize when they need help. Medical schools are a unique system where the curriculum and programming could integrate promotion of “self-care skills, instituting wellness interventions, and educating students about preventing and reducing burnout” (p. 244). In fact, Ishak concluded that when medical schools opted for a pass-fail structure instead of an A-F structure, the results of student wellbeing surveys illustrated a decreased percentage of depression and burnout among student respondents.

Summary

Throughout this chapter, the researcher deliberately chose an integrative literature review in order to define wellbeing and the stress associated with pursuing a medical degree. “Synthesizing the literature means that the review weaves the streams of research together to focus on core issues rather than merely reporting previous literature” (Torraco,

2005, p. 362). In the beginning of this chapter, a mosaic was described to illustrate how the holistic nature of the topic relies on a common thread while examining specific definitions about wellbeing and burnout. This approach has supported the theme that wellbeing is personal; it's a story told through the lens of experience "presenting provocative research questions that stimulate interest among other researchers," (p. 364).

While this chapter has contained the common thread about wellbeing, it has also shed light on how medical school students face challenging class schedules, academic rigor, and high expectations from not only their professors but by their own desire to achieve a medical degree (What to Expect in Medical School, n.d.). Throughout this chapter the discussion has revealed the ways in which medical school students define burnout. The specific behaviors and responses that students express in relation to their academic experience furthered the term "burnout" to include a lack of self worth, suicide ideation, exhaustion, and unmet needs (Drolet, 2010; Pagnin & de Queiroz, 2015). This chapter has also illuminated how students define "wellbeing" through survey responses and data analysis by a variety of researchers.

The survey responses and data analyses includes how wellbeing is acknowledged as feeling positive and by functioning well in life (Dyrbye, 2012). This literature review has also included an examination of current curricular trends and how innovative changes have helped students achieve wellbeing while not diminishing their academic knowledge. One change in particular, switching from letter grades to pass-no pass assessments, has alleviated some of the stress that medical school students face (Nam, 2019; Dunn, 2008). At the same time, this literature review included researchers who agree that teaching

self-care and including it in the curriculum is imperative for students to experience wellbeing (Ishak, 2013).

Although the research in this doctorate study has laid the foundation to better understand the current medical school climate as well as potential solutions to increase wellbeing, the next step was data collection and further study of a current medical school. In order to answer the call for additional research, chapter three explores the research design and methodology aspect of this study. Within the framework of the research design and methodology, a 2016 - 2019 survey that was completed by medical school students in a medical school is analyzed. A secondary analysis of that data is defined. Chapter Three also highlights interviews conducted by the researcher with current medical school students where the methodology is further described. The next chapter critically assesses how the research was conducted and why the research design was chosen and these descriptions help answer the primary and secondary research questions, *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree? What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout? And, What types of support do medical school students' suggest the medical school provide to enhance their emotional wellbeing?*

CHAPTER THREE

Research Design

Introduction

Experiences are emotional and subjective. Although there are numerous academic fields that deserve attention when considering wellbeing and how to manage life balance, this dissertation focuses on the medical school experience from the student point of view. Throughout Chapters One and Two, the research questions include the following: *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree? What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout? And, What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?*

While the journey to these research questions and the personal reason why the researcher is exploring this topic are important, Chapter Three delves into the tangible and concrete world of the research design including data collection. This chapter offers a variety of topics that begin with the rationale for the qualitative research paradigm, including a description about the researcher's chosen framework, and why it was selected as the optimal method. This section also defines the data collection method that focuses on a secondary analysis of a survey conducted by a medical school while also rationalizing the use of the survey for data to further answer the research questions.

Chapter Three includes descriptions of the participants who responded to the survey, the design and logistics of the survey while delving into the design of the secondary analysis. In order to deepen the research beyond the secondary analysis,

Chapter Three includes a second data collection method: qualitative interviews and the rationale behind them. The description for this method includes an overview of the participants, the interview design, the interview logistics, and the reasoning for the interview analysis. This chapter concludes with a look at research design limitations and a summation of the overall research methods.

Research Paradigm: Rationale for A Qualitative Research Design

Everyone has a life journey filled with triumphs and challenges; stories that are of shadow and light. In order to capture the essence of the medical school experience, the researcher would like to acknowledge from the start that the stories are as important as the textbook education that the students receive. This is not to say that what they are learning should not be considered during the research component of the dissertation to answer the question about wellbeing and medical school burnout. However, it is remiss and negligent not to embrace the personal, emotional, and less tangible aspects of the medical school journey. As noted by Jennings (2010) in the previous chapters, medical school does not need to be the disorienting and anxiety producing environment that students report. This chapter describes the methods used to explore and potentially answer the research questions about wellbeing and burnout.

From the outset, the researcher considered qualitative research methods in order to fully discover possible answers to the research questions based on the perspective of current medical school students.

For the purpose of this study, the researcher chose to first complete a secondary analysis of a survey followed by interviewing four current medical school students from a midwestern university medical school. The survey included medical students enrolled

during 2016 - 2019 when university staff created questions to ascertain how students reported their wellbeing and overall satisfaction of current programming. This survey was created in response to the loss of two students in separate suicides who attended classes at the medical school. After completing the secondary analysis of the survey, the researcher invited volunteers to complete qualitative interviews.

Each medical student participated in three separate interviews based on Siedman's (2013) Three Part Interview Framework. A total of 12 interviews were completed.

Data Collection Method One: Rationale for Completing a Secondary Analysis of Survey Data

The research design includes the use of a secondary analysis involving the use of existing data, collected for the purposes of a prior study. Heaton (1998) supports this decision by acknowledging it is appropriate to pursue a research interest which is distinct from that of the original work; this may be a new research question or an alternative perspective on the original question. Providing additional support for this decision is Fink (2017), who states that the use of survey data is a reliable method to ensure that the data collection is accurate. The researcher focused on an already-created survey including a three-year span where responses were recorded. The 2016 - 2019 survey included forced responses that were created for students to select. Fink describes forced responses in a survey format as a limitation wherein participants cannot provide additional details that might reveal more about their perspective. The researcher for this dissertation considered this limitation and chose to conduct additional qualitative interviews to explore a deeper understanding of the current medical school experience.

Before interviewing participants, a secondary analysis of the 2016 - 2019 survey created by university experts was completed to fulfill what Fink (2017) described as an important component for “reliable and valid surveys” (p. 11) in that the foundation of the questions comes from those who have the experience and knowledge about the subject matter. In this case, the 2016 - 2019 survey was created by educated university medical school leaders who specialized in psychology, wellbeing, and who had a thorough understanding of the medical school programming that required intentional curriculum changes to improve the medical school experience. The survey responses from the students in 2016 - 2019 included insights that later supported changes in academic scheduling and led to new programming that would help the mental health of the student population.

In order for administrators to understand what changes might be implemented and how students perceived the current programming, they created the 2016 - 2019 survey that included forced-answer questions. The researcher regarded the work of Fink (2017) as an inspiration and guiding light as far as agreeing with the 2016 - 2019 format choice. Fink also acknowledges the limitation to “choose closed questions for their relative ease of scoring, analysis, and interpretation. Closed questions require that all respondents interpret them the same way and that all relevant choices are included, mutually exclusive, and sensible,” (p. 40).

During 2016 - 2019, medical school administrators distributed an online survey that was emailed to medical school students attending the same campus. The use of an online platform as well as the email database to contact medical school students directly maximized the number of participants that Fink (2017) describes as why “surveyors like

online surveys because they can easily reach very large numbers of people across the world and because online survey software is accessible and relatively inexpensive" (pp. 11-12). Fink explains that online surveys also make it possible for surveyors to see the date, time, and how long the survey took for each respondent.

When acquiring access to the 2016 - 2019 survey, the researcher originally met in person with the Associate Dean of the medical school in 2017 and discussed the parameters in which the responses could be used. By the conclusion of the meeting, both the Associate Dean and the researcher were in agreement that the results could help answer the research questions.

Data Collection Method One: Design of Survey

The 2016 - 2019 survey was self-administered which streamlined the process providing two advantages: one, it was easy to send reminders and two, there was a high response rate which could be due to the ease of access for students with internet capabilities. Staff reported that the 4,472 completed surveys that were collected from 2016 - 2019 were easy to download and access the responses (P. Sherven, personal communication, July 14, 2020). Each of these variables, consistent reminders and ease of access, made it possible to conduct the research in a timely manner and according to Fink (2017), this is the core strength of surveys in regard to qualitative research (p. 15). The disadvantages are also important to consider.

Fink clarifies that "the surveyor needs reliable email addresses, the respondent must have reliable internet access, and the system can go down or be unreliable" (pp. 15 - 16). The staff who conducted the 2016 - 2019 survey leaned heavily on already established university email lists that included the medical students for the study (P.

Sherven, personal communication, July 14, 2020). The survey was sent during the summer which meant that there was the possibility that the students would not have internet access when they needed it to complete the questions. One aspect of the university medical school mission focuses on educating future rural physicians; this meant that the students would practice in small-town clinics and hospitals during the summer. This added another layer to the challenge that Fink (2017) describes as far as accessibility to the internet. In order to combat this issue, staff created a long term deadline.

While the disadvantages of email addresses and access to the internet were important for staff to plan for, there were other barriers that Fink (2017) describes including how students may not check their email as frequently as the researcher anticipated. Students may also balk at receiving surveys from senior staff and thereby not answer the questions. Staff acknowledged this potential barrier and favored prior relationship building. When students received the introduction email that the survey would arrive in a couple of weeks for them to complete, they were already familiar with the staff from prior emails related to student-centric programming that staff had organized and led (P. Sherven, personal communication, July 14, 2020).

Data Collection Method One: Secondary Analysis of Survey

While understanding the rural mission of the medical school campuses gives a glimpse into the background of the school, the study of the secondary analysis began with seeking permission to review the 2016 - 2019 survey responses. The staff person who shared the document with the researcher sent the password-protected file through a university program. The password-protected file was a Microsoft Word Spreadsheet that

contained 102 pages of data. Table 3 outlines each column in the spreadsheet that organized the 102 pages of information.

Table 3

Column titles for the 2016 - 2019 survey

| | | | |
|----------|---------------|-----------|-------|
| Column 1 | Progress | Column 8 | Q4 |
| Column 2 | Duration | Column 9 | Q5 |
| Column 3 | Finished | Column 10 | Q6 |
| Column 4 | Recorded Date | Column 11 | Q7 |
| Column 5 | Q1 | Column 12 | Q8 |
| Column 6 | Q2 | Column 13 | Q9 |
| Column 7 | Q3 | Column 14 | Score |

Table 3 summarized

Table 3 is designed to communicate how each column has a title and each column contains data based on the title. For instance, the Column 6 title is Q2 which is an abbreviation for “Question 2.” According to the series of survey questions, Question 2 is “This week my wellbeing needs were supported by my diet. I ate healthy home-cooked meals; restricted intake of highly processed foods; had a healthy relationship with my food,” (see Appendix A). In the spreadsheet that contained 102 pages of information, Q2 included the forced-answer responses which are discussed further in this chapter and in Chapter Four.

The researcher organized the nine questions into a more concise format by utilizing the Microsoft Word Spreadsheet function under the Edit tab “Find and Replace.” The researcher typed in every possible score from 1 - 45 to determine how many students

responded within each score. The medical school administrators who created the survey created the response score. The highest value was placed on the “Strongly Agree” response with the subsequent responses ranking lower down the line. The higher the score, the more likely that the student respondent strongly agreed with a statement. The lower the score, the more that a student disagreed with a statement. For instance, the 249 students who scored “40,” most likely agreed that their experience in medical school was positive. The 13 students who scored “3” most likely disagreed that their experience in medical school was positive. Therefore, the score totals led to the construction of the qualitative interview questions in that the researcher wanted to explore a deeper understanding of the medical school student experience and what it means for students to have wellbeing and potential burnout. The outcome of the score total process is shown below in Table 4.

Table 4

2016-2019 Survey response scores with number of students with each score

| Score Total | # of Students | | Score Total | # of Students |
|--------------------|----------------------|-----------------------|--------------------|----------------------|
| 9 | 15 | | 28 | 138 |
| 10 | 1 | | 29 | 143 |
| 11 | 4 | | 30 | 138 |
| 12 | 6 | | 31 | 193 |
| 13 | 3 | | 32 | 211 |
| 14 | 4 | | 33 | 246 |
| 15 | 7 | | 34 | 243 |
| 16 | 8 | | 35 | 253 |
| 17 | 17 | | 36 | 370 |
| 18 | 22 | | 37 | 258 |
| 19 | 25 | | 38 | 262 |
| 20 | 26 | | 39 | 257 |
| 21 | 31 | | 40 | 249 |
| 22 | 47 | | 41 | 180 |
| 23 | 54 | | 42 | 154 |
| 24 | 75 | | 43 | 130 |
| 25 | 67 | | 44 | 72 |
| 26 | 68 | | 45 | 113 |
| 27 | 97 | Total Students | | 4,747 |

Table 4 summarized

For this chapter, only a brief description about the steps taken to review the data is included with a more thorough explanation and analysis of the findings detailed in Chapter Four. Table 4 illustrates how the “Find and Replace” function in the Microsoft Word Spreadsheet shaped the data that was further analyzed. The secondary analysis of the survey responses support this study about medical school student wellbeing in order to further answer the research questions. The survey analysis considered the responses shared by the medical school students. Each medical school student was invited to submit their weekly response to track their personal wellbeing in six key areas: 1) Health, 2) Relationships, 3) Security, 4) Purpose, 5) Community & Environment, in conjunction with the model provided by the University’s Center for Spirituality & Healing.

Originally, the researcher requested access to the survey through the Associate Dean at the university medical school. This senior leader was involved with the discussions and implementation of programming based on the general responses of the survey. A formal report was not created to organize the responses or highlight programming needs. However, administrative leaders took note of student survey responses and implemented supportive programming based on conversations they had with each other and with student leaders involved with student wellbeing initiatives (P. Sherven, personal communication, July 14, 2020).

The researcher approached the Associate Dean requesting the anonymous survey results. The Associate Dean suggested that the researcher connect with the staff who issued the 2016 - 2019 survey (R. Michaels, personal communication, July 13, 2020). The researcher emailed the staff person who in turn agreed that the request was valid. The

staff person connected the researcher with the Medical Degree faculty who owned the survey as well as the supervisor of the staff person communicating with the researcher to ensure that all parties knew about the request.

Although the researcher followed protocol, there were additional University privacy regulations, and the university staff person suggested an additional step. Since the material would appear in a dissertation, it would be in the best interest of everyone for the researcher to officially request the survey data through the Medical Education Outcomes Center (MEOC). The researcher submitted a request through the MEOC website where MEOC staff responded and ascertained that the project was valid. However, according to University policies and procedures, the researcher needed to complete a series of privacy training workshops before gaining access to student response data (M. Stangl, personal communication, July 20, 2020).

The two trainings that the researcher underwent were the University's Information Security Awareness as well as the Federal Educational Rights and Privacy Act that ensures the protection of student privacy. In the meantime, the MEOC staff went through the process to gain data owner approval. The owners of the survey had to grant permission for the researcher to access the survey results. The approval was granted, the researcher successfully completed the training, and the survey data was sent through a confidential, password-protected online platform (Y. Miller-Cheng, personal communication, July 23, 2020).

The 2016 - 2019 survey results were shared with the researcher through an online private program provided by university staff from the Medical Education Outcomes Center (MEOC). The researcher could access this program by entering the

university-issued username and password given to the researcher when hired as a staff person nearly a decade ago. The same username and password migrated with the researcher staff person when hired at the medical school in 2017. The data appeared in a spreadsheet through the online program while the option to download the spreadsheet into an excel desktop version. The researcher chose to download the data in this format where it is saved on the desktop of the researcher where access is only available with the private employee username and password of the researcher.

Data Collection Method Two: Seidman's Three Part Qualitative Interview

After reviewing multiple methods that could lead to solid and reliable data collection, the researcher chose the Seidman (2013) three-part qualitative interview platform to study current medical school student responses to questions about burnout and wellbeing. In connection with the Seidman three-part interview process, Maxwell (2013) outlined that "in qualitative studies, the researcher is the instrument of the research, and the research relationships are the means by which the research gets done" (p. 91). This directly correlates with the current employment of the researcher where several years of working in the medical school led to asking the research questions which became the dissertation topic.

In order to deepen the understanding about the student experience, virtual interviews were conducted with four different students at separate times. Based on the 2020 pandemic guidelines by the Center for Disease Control (CDC), the researcher chose not to meet in person in order to maintain social distance. The interviews were accomplished through online Zoom meets that were recorded and transcribed by Mediaspace; a university supported closed captioning program that automatically created

a readable transcript. The interview transcriptions were then analyzed, producing a current data set discussed in subsequent chapters of this dissertation.

Research Setting

The university medical school where the survey and interviews were completed includes a two-campus structure where one is located in the metropolitan area in the midwest and the other is located north of the metropolitan area. The metro area medical school campus has a four-year medical degree with approximately 200 students in each medical school year to total 800 per calendar year. The northern campus has a two-year medical degree schedule after which students from the north transfer to the metro area to finish the last two years. The northern campus has approximately 60 students in each medical school year to total 120 per calendar year. For this research study, both campuses are included because both student bodies were surveyed at the same time.

The metro area medical school was founded in 1888 while the northern campus began in 1974 with both accredited to teach and matriculate medical doctor degrees. The mission of both medical schools is to lead in compassionate care physicians with a focus on serving diverse populations in rural and urban Minnesota. The mission is achieved through educating and matriculating medical school students while also building partnerships locally, regionally, nationally, and internationally.

Survey Participants

The metro area and northern campuses have similar student demographics. The average age is 24 and the gender is nearly the same for men and women. The 2020 entering class composition for both campuses illustrates that the majority of the students are from the state of Minnesota. For those who are underrepresented in medicine, the metro campus demographic is 18% and the northern campus is 21.5%. The remainder of

the statistics vary greatly between the two locations. Where the metro campus ranks higher in multicultural representation by the 2020 student body, the northern campus ranks higher in the multicultural population (24.6%) and the nonresident population (21.5%). Differences also abound where the metro area lists MN Future Doctors (4%) while the northern area does not list this demographic. In contrast, the northern campus includes the Native American population (24.6%) but the metro campus does not include it. The researcher has incorporated the current medical school student demographics because the demographics between 2016 - 2019 are not archived by university administration and are not available to include in this dissertation. However, it is important to note the general student population which has not drastically changed in the last decade (M. Long, personal communication, February 3, 2021).

The overview of the 2020 demographics is listed below in Table 5.

Table 5

2020 University Medical School Student Demographics

| 2020 Entering Class Metro Area MN Medical School Students | 2020 Entering Class Northern MN Medical School Students |
|---|---|
| Applied: 4,611 Enrolled: 175 GPA average: 3.7 MCAT average: 511.9 Average age: 24 | Applied: 2,148 Enrolled: 65 GPA average: 3.71 MCAT average: 506 Average age: 24 |
| Class composition: <ul style="list-style-type: none"> ● Male (46%) ● Female (54%) ● Multicultural (35%) | Class composition: <ul style="list-style-type: none"> ● Male (44.6%) ● Female (55.4%) ● Native American (24.6%) |

| | |
|---|--|
| <ul style="list-style-type: none"> ● Underrepresented in Medicine (18%) ● MN Future Doctors (4%) ● Minnesota residents (88%) ● Nonresidents (12%) | <ul style="list-style-type: none"> ● Multicultural (24.6%) ● Underrepresented in Medicine (21.5%) ● Minnesota residents (78.5%) ● Nonresidents (21.5%) |
|---|--|

The researcher of this dissertation topic is a staff person at the university medical school on the northern campus. The researcher has been in this professional position since 2017 as the director of alumni relations. The professional experience while working with the current medical school students and alumni on a variety of programming is the reason the researcher chose this medical school for the study. The researcher learned about physician burnout shortly after hire in 2017 and has pursued the topic because alumni would mention it to the researcher on a consistent basis. The familiarity and connection with both the metro area and northern campus also created a desire to learn about the current programs supporting students who would eventually graduate and become alumni.

Data Collection Method Two: Rationale for Three Part Qualitative Interview

Format

The secondary analysis of survey responses did not include questions about which campus or year the students were attending due to the anonymous nature of the survey. The survey also only included forced responses (see Appendix A). This is a fairly important limitation to consider when answering research questions that are subjective in nature. Maxwell (2013) eloquently stated “it is important to recognize that the meanings, beliefs, and so on of the participants in your study are a major part of what you want to understand” (p. 30). The question type of the 2016 - 2019 survey matters and the

subsequent qualitative interviews pieced together the story, the “meanings” that answered the research questions in this study. Fink (2017) reiterates this process by encouraging researchers to “Choose open-ended questions when you want to give the respondents the opportunity to express opinions in their own words and you have the interest in and resources to interpret their findings” (p. 40).

Although there are numerous data collection methods, and for this particular study, the utilization of surveys and qualitative interviews are good tools when comparing one dataset to another (Fink, 2017). This research paradigm presented an opportunity to collect information, compare it across many variables, and create a full explanation or description of phenomena where “surveys are information collection methods used to describe, compare, or explain individual and societal knowledge, feelings, values, preferences, and behavior” (p. 30) while qualitative interviews give space for the researcher to draw “inferences about the meaning of recorded information such as open-ended responses and comments” (p. 164).

When considering that the researcher is interested in qualitative data, open-ended questions deliver that which forced answer questions cannot: a personal statement where respondents can share exactly what they think and feel without interference by the researcher who may not provide an exact list of responses that fully match the student experience. This factor is important to consider when examining the subjective and emotional definition of wellbeing and “a survey is valid if the information it provides is an accurate reflection of respondents’ knowledge, attitudes, values, and behavior” (p. 78). It is possible that the 2016 - 2019 survey responses that were available for students to select did not fully help them define their experiences. The qualitative, in-person

interviews gave students an opportunity to answer open-ended questions. This setting provided them a chance to offer candid explanations and this qualitative research design is a good fit for this self-reported data. The researcher did note, however, that conducting interviews with multiple students might not deliver deeply personal accounts of the medical school experience. However, once the interviews were conducted and the transcripts from each interview were analyzed, the researcher was gratified by the robust and detailed content that went well beyond forced-answer responses typically used in a survey. According to Seidman (2013), the opportunity to create a robust narrative with interviewees “involves conducting a series of three separate interviews with each participant. It allows both the interviewer and participant to explore the participant’s experience, place it in context, and reflect on its meaning” (pp. 20-21). With this in mind, the series of three qualitative interviews with four current medical school students were conducted in order to learn more about the medical school student experience and whether or not the interviewees found the current medical school programming helpful.

Data Collection Method Two: Design of the Three Part Qualitative Interview

The researcher chose to conduct Seidman’s (2013) interview process where the virtual interviews consisted of three different meetings. The first interview examined the focused life history, the second interview concentrated on the current life experience in the context of medical school wellbeing and programming, while the third interview reflected on the meaning of the second interview while considering the role of the medical school. The nature of the interview questions invited subjective answers which a qualitative study supports and “each interview provides a foundation of detail that helps illuminate the next” (p. 24). At the same time, Warren (2001) agrees “qualitative

interviewing is based in conversation (Kvale, 1996), with the emphasis on researchers (Rubin & Rubin, 1995) asking questions and listening, and respondents answering” (p. 83). Since the qualitative interview design encourages interviewees to share rich details of lived experiences, the researcher chose an informal format to invite current medical school students into a three-part interview experience.

While the informal format invited the medical school students to speak candidly and to provide rich details about their experiences, the researcher chose specific terms for them to consider. The four terms that the researcher chose for students to focus on included success, failure, wellbeing, and challenges. The researcher chose these four specific words for students to consider in each of the questions based on the sources detailed in Chapter Two, the Literature Review. Among the researchers, Dybre (2013), Ishak (2013), Jennings (2009), and Nam (2019), consistently used these terms when describing burnout and wellbeing among medical school students. Ishak (2013) noted that students ranked higher in satisfaction when they felt they had succeeded but what does success look like to a medical school student? Dyrbye (2013) concluded that failure tended to lead to burnout but how did medical school students define burnout? Jennings (2009) focused on the theme that a challenging environment caused burnout in students but what was it about the challenges themselves that could lead to burnout? And finally, Nam (2019) discussed how suicidal ideation prevailed over wellbeing but how did students describe wellbeing through their own lived experiences? With these questions in mind, the researcher chose the four key terms based on publications referred to during this study. The researcher asked the medical school student interviewees to define success from their perspective; define failure from their perspective; define wellbeing from their

perspective; and, define challenges from their perspective. The researcher did not provide an established definition for each term. The researcher intended for the medical school students to define each term to learn more about how they personally perceived their experiences. The third and final interview also included the four terms. However, the third interview also reflected on the meaning of the second interview based on the student responses from the second interview. The interview included questions about the current medical school programming and if the interviewees found the programming helpful and supportive of their wellbeing (see Appendix B).

Prior to scheduling the interviews, the researcher created the questions that included the four terms. In order to schedule the interviews, the researcher sent an email describing the purpose of the questions, why respondents should care about answering the questions, why the students were selected, and an approximate amount of time to complete it (Fink, 2017, p. 71). The researcher also carefully selected participants to ensure that the comparison and analysis between the 2016 - 2019 survey and the follow up interviews would provide a depth and breadth that a single survey could not possibly achieve (Maxwell, 2013). The researcher also chose students only from the second year of medical school. According to Dyrbye (2006), the highest rate of burnout occurred during year one and two for the majority of the students in his study. The researcher chose students in their second year because the interviews were conducted about six weeks into the fall term. The first year medical school students could potentially have limited responses when describing their medical school journey since they had just begun their studies in medicine.

The open-ended nature of the interview process where questions were asked during a virtual meeting invited the kind of conversation that Warren (2001) highlights. Each of the interviews, which consisted of three separate meetings for each participant, lasted between 30 - 45 minutes.

The first interview with each student began with the researcher introducing herself while inviting the interviewee to follow suit. Once the student had shared their introductory comments that included how their day was going and if they needed additional time to work out any technology challenges, the researcher asked each student if he or she was comfortable with having the interview recorded. During the first interview, each participant agreed to having the interview recorded. Once they approved of the process, the researcher selected the record button and moved into the interview questions. The three questions asked of each participant during the first interview included inquiries about the medical school student life history.

Virtual Interview 1: Focused Life History

| | |
|------------|--|
| Question 1 | How did you come to be a medical school student? |
| Question 2 | How did you arrive at the current university? |
| Question 3 | Is there anything else that you would like to share with me? |

Potential follow up questions based on the responses

| |
|--|
| What else stands out that happened within this experience? |
| What did you do, think, feel or view as influential? |

The second interview focused on medical school student wellbeing in context of the current medical school experience as perceived by the interviewed student. The interview began with brief greetings with each student sharing how their day was going. When each student had concluded, the researcher then asked if they approved of having the interview recorded. For the second interview, every participant agreed to have the conversation recorded at which time the researcher selected the record button before asking the first question. The five questions asked of each participant included inquiries about their experiences with success, failure, wellbeing, and medical school challenges.

Virtual Interview 2: The Detail of Experience

| | |
|------------|---|
| Question 1 | How have you experienced success as a medical school student? Please describe. |
| Question 2 | How have you experienced failure as a medical school student? Please describe. |
| Question 3 | How have you experienced wellbeing as a medical school student? Please describe. |
| Question 4 | How have you experienced challenges as a medical school student? Please describe. |
| Question 5 | Is there anything else that you would like to share with me? |

Potential follow up questions based on the responses

| |
|--|
| How and when did this occur (or what else was happening at this time that might have influenced the experience)? |
| Does this remind you of another memory? |
| Give me additional background on what happened. |

The third and final interview began in a similar fashion as interviews one and two wherein the researcher and participants greeted each other. The researcher briefly

checked in on how each student felt their day was going, and the final initiation of recording the interview was approved by every participant. The four questions asked of each participant invited them to reflect on the meaning of their second interview responses. In order for the students to reflect on their previous responses, the researcher read directly from the second interview transcripts. The students were then asked to respond to specific questions based on what was read. For instance, the researcher read the response about how each student experienced success based on the second interview transcript. The researcher followed that reading by asking how students described the role of the medical school in their experience with success. For the third interview, this protocol was followed for every participant in exactly the same way for all four questions.

Virtual Interview 3: Reflection on Meaning

| | |
|------------|---|
| Question 1 | Based on your description about experiencing success, how would you describe the role of the medical school? |
| Question 2 | Based on your description about experiencing failure, how would you describe the role of the medical school? |
| Question 3 | Based on your description about experiencing wellbeing, how would you describe the role of the medical school? |
| Question 4 | Based on your description about experiencing challenges, how would you describe the role of the medical school? |

Potential follow up question based on the responses

When you experienced [success, challenges, failure, wellbeing], what was communicated or what messages were understood from medical school faculty and classmates?

Data Collection Method Two: Interview Logistics and Analysis

The four current medical school students who the researcher interviewed during separate virtual meetings responded to the same questions during each interview. These questions were posed to them by the researcher. The researcher chose Zoom meets for the series of three virtual interviews to ensure accessibility for the medical school students. Each interview lasted between 35 - 45 minutes. While the interviews commenced, they were recorded through the Zoom meeting program. Once the interview was completed with the researcher verbalizing that the recording had stopped, the Zoom meeting ended.

The Zoom program automatically uploaded the video and audio components to the desktop of the researcher. The researcher downloaded the audio version after each interview. The researcher labeled the audio file and then uploaded the file to Mediaspace, which is a program supplied by the university to save both video and audio recordings of Zoom meetings. These are only accessed through an online platform that is both username and password protected to ensure privacy and confidentiality. Users can choose to select their audio and video downloads to become publicly accessible. For this dissertation, the researcher chose to keep the audio downloads private ensuring that no one would have access to them other than the researcher.

Once the transfer to Mediaspace was completed, the researcher selected additional closed captioning through the Mediaspace options offered on the platform. Within 24 hours, every interview had a readable transcript that the researcher could download and save on the desktop computer of the researcher which is also password protected. These transcripts were not neatly organized but rather a conglomeration of every word spoken during the interviews.

The researcher followed up by editing misspelled words while also inserting paragraph spaces and overall formatting. The final versions of each transcript, totalling 12 in all, are saved in a Google Drive in a file that is password protected and only accessed by the researcher.

The researcher conducted all of the interviews before creating a coded system to identify different themes and the relationships between them. This open coding approach allowed the student interviewees to create their own patterns through their responses during the three-part interview format rather than the researcher seeking specific words or themes during the interviews.

The thematic analysis included a close look at sentence structure and common words repeated amongst the four interviewees. The numerical outcome where certain words were used more often than others created a value system that ranged from most used to least used. This coding approach allowed the researcher to accurately interpret and identify how medical school students describe wellbeing and burnout, and if there were commonalities between the students to strengthen the understanding of their experiences. This is an important aspect of the analysis because it directly addresses the research questions on how students personally describe wellbeing and burnout. At the same time, thematic coding is important in order to identify how students perceive how their medical school is responding to their needs which answers the secondary research questions.

Interview Participants

Four current medical school students were interviewed individually three different times for a total of 12 interviews that the researcher conducted. Two of the participants

were female and two of the participants were male. All of the participants were in their early twenties and all of the participants were studying for the medical degree; experiencing their second year on the same campus at the same university.

Table 6
2021 virtual student interviews

| | |
|-------------------|--|
| Demographics | Two females Two males Age: early twenties Second year medical school students |
| # of Participants | Four |

Table 6 Summarized and IRB Approval

The two columns in Table 6 outline who the researcher interviewed. Before the interviews could take place, the researcher needed approval from the Institutional Review Board (IRB) at Hamline University. The IRB exists to promote participant related research that is both ethical and responsible. The researcher for this study chose to conduct a secondary analysis of an existing survey and organized qualitative virtual interviews with four medical school students who were currently in their second year of medical school at the same campus. As part of the dissertation process, the researcher submitted a proposal that included the Hamline University Exempt Review Protocol Application, Informed Consent to Participate in Research, a letter approving access to the survey results, and a letter approving of the virtual interviews of current medical school students.

Limitations of the Research Design

The limitations of the research design include issues with the selection of interviewees and an insufficient sample size. These two limitations impacted the findings

and created generalities that might not reflect the broader perspective of medical school students. The selection process included an email invitation to the second year students attending the northern campus. The researcher met with the first interviewee who offered to encourage fellow classmates to respond to the invitation. Within two days, three additional students volunteered to join the research project as interviewees. The researcher followed up with Zoom hangout invitations to begin the process of Seidman's three-part interview platform.

This selection process limited the researcher to only four candidates because of the nature of the interview process. There was insufficient time to conduct more than the four, three-part interview process for each student. In order to solve this limitation, the researcher recommends the potential for a screening process where the researcher could conduct five minute conversations with each student recommended by the Associate Dean. During a short interaction, the researcher could ask questions about whether or not the medical school student is comfortable discussing personal, in-depth details about wellbeing. In this setting, the researcher would potentially have time to ascertain openness and transparency prior to the three-part interview.

The second limitation, the insufficient sample size, creates the potential that the four medical school students who were interviewed might not reflect the majority of perspectives that students have about wellbeing and the programming offered by the medical school. It is possible that the interview responses are unique in nature and while this is important to also consider for research purposes, it would strengthen the research analysis if more students were interviewed to determine what common themes and concepts exist from a larger pool of candidates.

Chapter Summary and Transitions to Chapter Four

Throughout this chapter the researcher explored the methods in which the primary and secondary research questions were answered. The research paradigm included a qualitative approach for two different forms of data: an online survey spanning three years and virtual qualitative interviews. Both forms gathered responses from current medical school students. Chapter Three also examined the secondary analysis of existing data and the method of distribution for the online survey where 4,472 responses were collected. The 2020 student demographics and the student demographics for the ones who were selected for the virtual interviews were also included in this chapter. These methods culminated into a better understanding of the student population and the method of analysis that the researcher chose to implement.

In the following chapter, the analyses of the qualitative data are examined. The findings in Chapter Four include the themes and concepts that emerged from the coding conducted by the researcher. Chapter Four continues the journey where the researcher attempts to answer the primary and secondary research questions: *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree? What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout? And, What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?*

CHAPTER FOUR

Results

Findings of the Study

The purpose of this study is to answer the primary research question: *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* At the same time, this study aims to also answer the secondary research questions: *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?* And, *What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?* Throughout this investigation, the researcher used a qualitative foundation by examining the results from a medical school survey from 2016 - 2019 and conducting interviews with four current medical school students.

The interviews with the students aligned with Seidman (2013) whose use of a three-part interview process revealed a deeper and more meaningful portrait of the interviewees than responses from a survey. Both tools are helpful when answering research questions. However, Seidman states “the primary way a researcher can investigate an educational organization, institution, or process is through the experience of the individual people” (p. 10) rather than through survey responses alone. For this chapter, the researcher has chosen to pivot from a third person voice to a first person voice in order to share the stories discovered during the interviews as well as the acknowledgement that

interviewers must not only identify their connection with the subject of the interview; they must

also affirm that their interest in the subject reflects a real desire to know what is going on, to understand the experience. If, in fact, interviewers are so intimately connected to the subject of inquiry that they really do not feel perplexed, and what they are really hoping to do is corroborate their own experience, they will not have enough distance from the subject to interview effectively. The questions will not be real; that is, they will not be questions to which the interviewers do not already have the answers. (p. 32)

The researcher agrees with Seidman (2013) and believes that conveying how a certain level of ignorance led to meaningful answers is best told from a personal perspective and thus the first person narrative.

A Plan to Discover the Personal Story of Student Wellbeing

When young adults begin to apply to medical school, they have completed at least an undergraduate degree. The applicants are from every background imaginable and not one student is the same as another; they are as varied as any academic population. When the administrators agreed to share the 2016 - 2019 survey results that included questions about wellbeing, I planned for the data results to answer the research questions to a certain degree. However, I also wanted to understand who the current students were; a more in-depth look into their lives. Even though the data from the survey would offer some insights, meeting with students individually would lead to a depth of information

that a survey alone could not accomplish. In fact, “at the root of in-depth interviewing is an interest in understanding the lived experience of other people and the meaning they make of that experience,” (Seidman, 2013, p. 9).

As a staff person at the medical school, I care about the wellbeing of the students and learning more about them was at the core of the decision to meet with them separately for three different interviews. As I approached this method, I considered that the majority of students at the medical school where the research took place were from rural communities. Based on the medical school’s mission statement, students interested in practicing rural medicine and indigenous health seek a medical degree from this campus. But, there had to be more to their story. I was interested in learning why else they might have chosen this medical school: “Why else were they pursuing a terminal degree?” and “How did they perceive the way in which the university supported their wellbeing?” In other words, I wanted to know their personal story.

Process of Data Collection

2016 - 2019 survey responses. Throughout the three-year span between 2016 - 2019, medical school administrators emailed a survey that included nine questions. They sent this survey each year to current students with a total of 4,747 students who completed the survey during that time. The responses to each question were given a score where the higher number conveyed a higher sense of agreement to the question. For instance, question five states “This week I was able to meaningfully connect with members of my support network. I called home; ate dinner with my partner; enjoyed coffee with a friend.” The entire survey consisted of nine questions and were worded in a similar fashion (Table 3).

Table 3*2016-2019 Survey Questions*

| | |
|---|---|
| 1 | This week, my level of physical activity met my wellbeing needs. I was active to keep my body strong and healthy; I met my exercise goals. |
| 2 | This week my wellbeing needs were supported by my diet. I ate healthy home-cooked meals; restricted intake of highly processed foods; had a healthy relationship with my food. |
| 3 | This week I slept enough to meet my wellbeing needs. I felt well rested throughout the week. |
| 4 | This week my wellbeing needs were supported by my emotional self-care. I took measures to reduce stress; practiced mindfulness; sought help. |
| 5 | This week I was able to meaningfully connect with members of my support network. I called home; ate dinner with my partner; enjoyed coffee with a friend. |
| 6 | This week I took steps to keep myself safe and do what I could do to address worries. I avoided checking my phone when walking or driving; examined anxieties to minimize concerns; used my planner to organize my time; updated my budget. |
| 7 | This past week I was able to contribute in some way that benefited others or the greater good and enhanced my sense of meaning. I volunteered; engaged in a career development activity; engaged in a hobby. |
| 8 | This week I participated in ways that benefited myself and the community. I attended a lunch lecture or community event, shared notes on the class page. |
| 9 | This week, I made efforts to engage with my environment. I cleaned and organized my personal space; visited a park or museum; sought out an uplifting study space. |

The results of the survey responses throughout the three years varied greatly. The forced responses did not invite additional, individual answers. Students could only select responses that were offered in the survey.

Table 4*2016-2019 survey forced response options*

| |
|---|
| Strongly Agree |
| Agree |
| Somewhat Agree |
| Neither Agree or Disagree |
| Somewhat Disagree |
| Somewhat Disagree But I Took Steps To Try |
| Strongly Disagree |

The medical school administrators who created the survey created the response score. The highest value was placed on the “Strongly Agree” response with the subsequent responses ranking lower down the line. The higher the score, the more likely that the student respondent strongly agreed with a statement. The lower the score, the more that a student disagreed with a statement. The responses were tallied and the final number resulted in a “score total” for each student.

The data set shared for analysis for this project only included the “score total” and not the individual totals for each student. The data set shared with the researcher did not include a thorough breakdown where if a student responded high to one question they may have responded low to another. Due to confidentiality and privacy of data, individual student scores were not shared for analysis. The score total and the number of students was the data available for this research project. The score total illustrates an overall numerical value of the entire survey as illustrated in Table 5.

Table 5

2016-2019 Survey response scores with number of students with each score

| Score Total | # of Students | | Score Total | # of Students |
|-------------|---------------|-----------------------|-------------|---------------|
| 9 | 15 | | 28 | 138 |
| 10 | 1 | | 29 | 143 |
| 11 | 4 | | 30 | 138 |
| 12 | 6 | | 31 | 193 |
| 13 | 3 | | 32 | 211 |
| 14 | 4 | | 33 | 246 |
| 15 | 7 | | 34 | 243 |
| 16 | 8 | | 35 | 253 |
| 17 | 17 | | 36 | 370 |
| 18 | 22 | | 37 | 258 |
| 19 | 25 | | 38 | 262 |
| 20 | 26 | | 39 | 257 |
| 21 | 31 | | 40 | 249 |
| 22 | 47 | | 41 | 180 |
| 23 | 54 | | 42 | 154 |
| 24 | 75 | | 43 | 130 |
| 25 | 67 | | 44 | 72 |
| 26 | 68 | | 45 | 113 |
| 27 | 97 | Total Students | | 4,747 |

The information listed in Table 5 includes two columns: “Score Total” and “# of Students.” The first column, Score Total, is based on a point value given to student responses to the 2016 - 2019 survey. The lower the score, the more likely that students responded that they disagreed with the survey prompts. The second column, # of Students, lists how many students received the same Score Total. For instance, the first line of Table 5 has a score total of “9” with 15 as the number of students. According to a staff person familiar with the survey, this means that 15 students answered their survey questions with a majority of “Strongly Disagree” responses (P. Sherven, personal communication, April 13, 2021). As the Score Total increases in Table 5, it is more likely that students responded favorably to the survey questions. For instance, the last set of numbers in Table 5 has the number “45” with 113 students. Based on the staff person who explained the results, this means that students were more likely to respond “Strongly Agree” when answering the survey questions (P. Sherven, personal communication, April 13, 2021).

Interviewing Students Based on Seidman’s Three-part Process

Although Table 5 includes a general view on how many students agreed or disagreed with the 2016 - 2019 survey questions, the survey data did not reveal the individual story of each student. I was interested in learning more about current medical school students outside of the survey through individual interviews. The individual stories of each student provided a closer examination of what wellbeing looks like and feels like for current medical school students. In fact, “people’s behavior becomes meaningful and understandable when placed in the context of their lives and the lives of those around them” (Seidman, 2013, pp. 16-17).

Seidman (2013) acknowledges that a one-time interview can reveal a great deal of information about the interviewee. However, Seidman (2013) suggests that three separate interviews will create a more detailed outcome that will unearth connections and a deeper understanding about the person. The use of this phenomenological approach allows the researcher to not only learn more about a specific experience but also the meaning that the person has connected to it within the context of the research topic.

Based on Seidman's (2013) structure, the three interviews were scheduled separately and for this research, at least a week passed before the second and third interview took place. According to Seidman, scheduling the interviews too close together would not give the researcher time to correct recording errors in the transcript or to add nonverbal notes to the transcript before it was analyzed for themes and connections. Seidman also suggests that researchers resist analyzing the transcripts before all of the interviews are conducted. By waiting until each interviewee has met for all three interviews, the researcher is less likely to create assumptions or look for thematic meaning during the subsequent conversations.

Seidman's (2013) interview structure begins with the first interview, the Focused Life History, where the interviewer asks 'how' questions in order to understand the interviewees' decisions that led to the present day. The second interview is the Detail of Experience which concentrates on the participant's current life within the context of the topic. The final interview is the Reflection on Meaning. This conversation invites the interviewee to consider the meaning of his or her responses from the second interview; to think about what it means to them and how they relate to those experiences. The questions for each interview were exactly the same for all four of the medical school

students who were interviewed. For this research, all of the interviews were conducted virtually through the university online zoom platform. The four medical school students who were interviewed agreed to have each session recorded and then transcribed by the researcher.

Overview of Medical School Student Interviewees and Interview One

For continued privacy and confidentiality, the current medical school student interviewees' names have been changed to pseudonyms to protect their identity. I interviewed two females and two males. All four students attend the same university medical school on the northern campus, and they are all in their second year pursuing a medical degree. The interviewees are in their twenties having completed undergraduate degrees and additional experience in varying medical fields and engineering. They were born and raised in rural communities and each interviewee mentioned the university medical school mission as a driving force behind their choice to attend.

During this first interview, Focused Life History, participants were given an opportunity to describe their background based on how they arrived at the current medical school where they are studying for a medical degree. The details that emerged created a profile of each that contained descriptions of their family, their education, and at some points their aspirations to achieve goals that were either lifelong or inspired by circumstances before applying to medical school. There were three questions asked of each interviewee during interview one and follow up questions as needed which is illustrated in Table 6.

Table 6*Interview One Questions*

| | | |
|----------------|--|--|
| Question One | How did you come to be a medical school student? | <p>Follow up questions based on responses:</p> <p>What else stands out that happened within this experience?</p> <p>What did you do, think, feel or view as influential?</p> |
| Question Two | How did you arrive at the current university? | <p>Follow up questions based on responses:</p> <p>What else stands out that happened within this experience?</p> <p>What did you do, think, feel or view as influential?</p> |
| Question Three | Is there anything else that you would like to share with me? | <p>Follow up questions based on responses:</p> <p>What else stands out that happened within this experience?</p> <p>What did you do, think, feel or view as influential?</p> |

Anna. Since Anna was not from Minnesota, Anna was unique from this perspective out of the four interviewees. She grew up in Indiana and attended school in Washington, D.C. From there, she lived in Alaska and was introduced to rural health and medicine. From a young age, Anna dreamt of becoming a doctor but it was not until high school when the idea became more concrete. Having grown up with sisters, she describes herself as high achieving and competitive with a profound interest in medicine. However, she shared that her free time was spent on a variety of different things.

My other interests are very unrelated to medicine. I try to engage in other activities. In college, I enjoyed outdoor education including training in wilderness first aid and later as a first respondent during hurricane Katrina. This was after college but all of those opportunities gave me direct care experience and problem solving skills.

While she knew that she would pursue a medical degree, she did not attend a college that offered a pre-medical undergraduate degree.

Anna commented that her nontraditional approach widened her understanding of people through outdoor education classes and peace studies. She realized that even though she experienced a variety of things including hurricane Katrina as a first respondent, “Moments like that pulled me back towards wanting to go into medicine. And then it was more about finding the niche of medicine that I would go into.” During her time in Alaska, she worked with adolescents in a rural community. Her work began in their high school and then progressed to a behavioral health setting with the same students. In this arena, Anna discovered what it meant to have a role in rural medicine and health.

That’s where I learned about historical trauma and recognizing trauma informed care. I was really drawn to the idea of how a primary care practice was embedded in community care. That it would be a more intimate relationship with the surrounding community. That’s how I ended up coming to [this university]. A desire to take care of people but also interested and engaged in the academic, intellectual side of things that would challenge me.

When Anna began to search for medical schools to apply to, she sought mission statements and programs that highlighted early clinical experience as well as work with native people and organizations.

With her interest in early clinical experience and indigenous medicine, Anna discussed her options with her parents and took a closer look at the northern campus. “Every time I mentioned that I was applying or interviewing up here, they were so happy. When I moved back to the midwest from Alaska, they were thrilled.” Although her parents’ enthusiasm was welcome, a favorite uncle was given credit for inspiring her to consider a future in medicine. He also walked a non-traditional path by studying in a small liberal arts college. He became a family physician in New York and primarily served HIV positive patients. When he retired from medicine, he chose to become a professional dancer.

He was always a very thoughtful person who cared deeply and worked hard. He was also funny, interesting. He enjoyed a lot of things and we got along really well. He was a big influence for me because he was socially conscious and embedded in his community.

Mark. The rural upbringing that Mark experienced led him to consider medicine in a similar setting and he began to find an interest in the subject while attending high school. “My dad thought I should be a physician, and I liked the idea.” As a lawyer, his father encouraged his son to never consider a career in law. He encouraged him, instead, to pursue medicine but Mark admits

If my dad were a physician, I think he'd tell me to never go into medicine. I think he's that type of person; not that law is horrible or anything like that but his advice stuck with me. It was a guiding force.

As he described his education, however, Mark admitted that there were limitations that he was not aware of until he attended college for his undergraduate degree in a metropolitan area. A lack of educational resources and basic knowledge about the process of medical school including specialties, residency expectations, and fellowships where financial support and clinical experience would help develop a future physician were barriers he had to overcome. "I didn't understand those words. I didn't know any of it existed." In fact, he spent two years preparing to apply to medical school. He chose to spend those two years of preparation after he met with a senior faculty member from the northern campus he eventually attended. During those two years after earning a bachelor of arts degree, Mark worked on building up his resume which included an undergraduate degree in sociology. He moved to a northern area of the state and worked as an EMT, progressing to an ER technician position. "With those two things, I felt a lot more comfortable in my application. I applied to 12 medical schools. I had one interview and one acceptance mainly because of my work in a rural area."

Mary. Born and raised in a rural community, Mary grew up with a father who was a physician. She was familiar with the life of a practicing doctor but it was in school where her interest began to develop. She had the opportunity to take classes in high school that expanded her education in science and health. In fact, those classes led to her undergraduate degree in public health which then led to a masters in public health. "Near the end of my masters, I realized that I was really drawn to the clinical aspects of

everything I was learning in school. I thought I'd take the MCAT to see how it went. I did very well."

As a second year medical school student at the northern campus, Mary acknowledges that there were challenges when she applied because she has a disability. While she can read, write, and participate in the classroom setting, accommodations were necessary including when she took the MCAT.

They didn't know what to do at first. They had never had anyone with my condition apply for medical school. They wanted some objective testing but there wasn't really a way to measure what they needed. Eventually I got the accommodations, but it was definitely a barrier I did not expect.

While the mission of the northern campus was certainly a reason to consider applying, Mary was also motivated by the lower cost of in-state tuition. She applied to several schools in the state but her medical school of choice did not extend an invitation. She was, however, invited to attend the northern campus. "I wasn't sure about going here. My significant other is not in the area, and I preferred not moving during a pandemic. But now that I'm here, it is definitely the right fit for me."

Zach. With a family history in various medical fields, Zach initially chose a career in engineering. "I had some good successes as an engineer, but I wasn't feeling particularly fulfilled. I made good money but I returned to my roots to pursue medicine." As an engineer, Zach worked with people he admired and respected, but he admitted to an internal conflict that chafed at his sense of satisfaction. He described how some coworkers did not reflect his values.

I started thinking about people I looked up to, including my hometown doctors. My dad. My grandpa. A bunch of people who all happened to be in medicine. They shaped my values and in that introspection, I realized that I wanted to do something else with my life.

While Zach considered how his values were shaped, he was not forthcoming with additional details about his background. However, he did share about the connection between his upbringing and the northern campus mission. While born and raised in a rural area in the same state as the medical school, Zach knew that in itself would help his chances when applying. “They are fostering doctors who are willing to reinvest in the program and invest in the communities [in the state]. So, on every front I was a good match especially since my dad attended school there too.”

Even though Zach could have stayed within the state for his first college degree, he chose to pursue his undergraduate studies in a different state. His engineering career led him to Detroit which gave him experience being away from home and family. When he began to apply to medical schools, he considered location because he wanted to be geographically closer after knowing what it was like not having family nearby. “Last week I had dinner with my sister. I went to class the next day. I wouldn’t be doing that if I was out of state, that’s for sure.”

Interview Two: Detail of Experience

During the second interview, participants were asked five questions that specifically included four terms that tie into the primary research question and the secondary research questions (Table 7). These terms include success, failure, wellbeing,

and challenges. The participants responded with various perspectives that ultimately led to common themes that are later discussed in this chapter.

Table 7

Interview Two Questions

| | | |
|----------------|--|--|
| Question One | How have you experienced success as a medical school student? Please describe. | Follow up questions based on responses: What else stands out that happened within this experience? What did you do, think, feel or view as influential? Does this remind you of another memory? |
| Question Two | How have you experienced failure as a medical school student? Please describe. | Follow up questions based on responses: What else stands out that happened within this experience? What did you do, think, feel or view as influential? Does this remind you of another memory? |
| Question Three | How have you experienced wellbeing as a medical school student? Please describe. | Follow up questions based on responses: What else stands out that happened within this experience? What did you do, think, feel or view as influential? Does this remind you of another memory? |
| Question Four | How have you experienced challenges as a medical school student? | Follow up questions based on responses: What else stands out that happened within this experience? What did you do, think, feel or view as influential? Does this remind you of another memory? |
| Question Five | Is there anything else that you would like to share with me? | Follow up questions based on responses: What else stands out that happened within this experience? What did you do, think, feel or view as influential? Does this remind you of another memory? |

Anna. Throughout the past two years, Anna has experienced and defined success as a combination of traditional achievement (good grades) and “harder to explain but still something achieved.” However, the medical school recently changed their grading system to a pass and no pass platform. Anna described the experience as confusing because she had defined academic success through letter grades her entire life. “I

definitely worked through trying to reformat my understanding of specific grades because it's different now that it's pass-fail. It took all of last year to reorient. To know that I am succeeding." At the same time, Anna describes her success at the medical school as recognizing competency when new knowledge is gained.

When considering failure, Anna turns to similar evidence to point out when she has experienced failure as a medical student. "The failure of learning, the material failure of not quite understanding how to learn it. Being overwhelmed by what's presented and when exams don't go well." Anna also considered her personality as an introvert as a potential failure in a world where making in-person connections is imperative. When she described how the world places value on a person's ability to network easily, she admitted to feeling a sense of failure.

I identify more as an introvert. I think there's a lot of value that's given to people who can communicate very easily with a lot of people. We're just kind of expected to know how to do that and then to make a name for ourselves. There's a lot of ways that I worry if I'm ever going to be capable of being a physician and being what I'm supposed to be; when I'm exhausted and don't care what I'm seeing? That feels like a failure because that's not what you're supposed to be when you're a physician.

Anna visually perked up and sat straighter during the part of the interview when we discussed wellbeing. She looked fully into the camera and described cooking and baking bread. She shared details about canning and how she has a fermentation shelf in order to make sourdough bread. She smiled when she talked about her boyfriend and how they garden together. When she can, she finds time to exercise because "I'm a person who

needs exercise to feel calmer. So I use exercise for my anxiety, for my emotional wellbeing.” Anna also talked about the therapist she meets with who encourages her to keep a steady routine.

As the second interview continued, Anna shared details about the challenges she has faced since experiencing medical school as a student. The first thing she touched on was maintaining mental health. “Burnout is a challenge. Being able to recognize what I need and following through with it.”

The second thing that she expanded on was not feeling useful in her role as a student and as a learner. “I’m not actively participating in helping people yet and that’s why I’m going into medicine. To maintain the idea that my role is to learn but if I’m not learning the material, what am I doing? It can feel hopeless.”

When I asked her if there was anything else that she would like to share with me, she spent several minutes describing the COVID-19 pandemic as it disrupted in-person learning.

We’ve had a particular kind of first year of medical school since it was entirely virtual. I just moved to the state and only now I’m making connections, asking questions, sharing struggles. I still don’t have very many close medical school friends. I think that makes us different from previous years at this campus.

Although Anna expressed frustration about feeling isolated, she also communicated that in-person classes were slowly changing the learning climate. She shared that she looked forward to the coming year where being in the same room as classmates could lead to friendships that had not had the previous year.

Mark. When I asked Mark how he had experienced success at the medical school, he thought for a moment and then described how his take on success is outside of academic standing. “I wanted to do medicine. I knew I wanted to go into it. Figuring out how I best fit into the framework of modern medicine in the United States today? That to me is success.” He also shared that finding a cause that he can connect with and joining groups who support the cause makes his life successful. In fact, taking time with friends and saying “yes” to their invitations were at the top of his list when detailing how he had experienced success at medical school.

During the interview, Mark described failure through an academic lense where keeping track of information and dense material was difficult for him. He perceived this as a failure on his part as a medical school student. While he shared details about how he failed to keep track of dense notes from his classes, he thought that a spreadsheet might organize the material better for reviewing later on but that he had not taken the time to create one. He also described his experience with patients where he feels anxious and forgets procedures he thought he had committed to memory.

I’m getting in there and I’m just a little too on edge. There’s an anxiety curve, a certain level of anxiety where we can perform our best and then after that, we just fall off again. I think I’m just a little too anxious because I’m forgetting very general physical exam maneuvers. I tell myself I should do more of them to get through the anxiety.

As Mark described his anxiety and went into detail about a procedure he had practiced many times, he rubbed his forehead numerous times.

He explained that medical students are usually nervous when first practicing on a real patient. He commented that this nervousness could lead to a better outcome because he would concentrate even more when he felt the anxiety rising. However, in the situation he described above he realized that his nervousness was at a high pitch when he could not remember the basic details about a general physical exam “which we practice over and over again in class. It should be easy by the time we meet with a patient.”

When Mark talked about wellbeing, he defined it as structured around diet, exercise, and sleep. “Those are the cornerstones for me, and I’ve been able to functionally get enough of all three.” However, finding balance with exercise during the winter was difficult. The resources available on the campus were limited and the indoor workout spaces were usually at capacity when Mark would go. He also did not appreciate that there were students exercising whose masks were half on or slipping beneath their noses. “I’m not worried about me. But, I don’t want to spread the virus and being in that space, seeing the masks not properly worn. I avoid that situation whenever possible.” Even though exercise was not always possible when he had time for it, Mark emphasized how he would make a conscious effort on a near daily basis to say “yes” to invitations from his friends and classmates. “It is too easy to say “no” in medical school. We have a lot expected of us. Taking time for my friends is important for me to stay healthy.”

Although Mark takes time to socialize with friends and classmates, he thought that how the school organized class materials was a big challenge because every faculty person had a different approach as well as how they shared learning materials with the students. Each faculty member had a preferred method and at times, a long history of sharing materials in a very specific way. For instance, one professor only used

Powerpoint presentations. Another professor only used a textbook and did not offer online access to lecture notes. “There's a feeling that things are done because that's the way they have always been done.” When I asked him to further describe what he meant, he explained that each class might have updates or important information that students need to know for an exam or for a discussion the next day.

You need to check Google calendar, the Canvas calendar, the pre-work that's listed someplace else. You have to check all these different places because no one uses the same system. And just as soon as you get used to the classes, they wrap up and you start a new term with new faculty who have all sorts of different ways to share important academic information. It is so frustrating.

While faculty can choose how they wish to share materials with students, the frustration that Mark described led to him wondering out loud if the challenges he experienced were simply to prepare him better for practicing medicine.

When I asked him if there was anything else he would like to share, he spent approximately two minutes discussing what he felt was odd about challenges in medical school. “I don't understand why people enjoy the stress, the frustration of medical school. The idea that it should be stressful and frustrating.” Mark continued to describe how he thought that the general public perceived medical school as stressful and that anxiety is part of the experience. Mark strongly disagrees that high stress and anxiety is necessary to produce good doctors. He also described how some faculty at the medical school seem to increase the stress because they believe that students will learn to manage it better if they experience it before earning their degree.

I don't think you learn how to manage stress better by being put into stressful situations. Higher ups think it builds character and helps with stress management. I think people develop dysfunctional reactions and coping mechanisms that do not help them when they're doctors. Faculty should teach us how to manage stress appropriately before we burn out.

During the interviews with Mark, he defined wellbeing as something he could manage through diet and lifestyle choices. He found the organization of class materials from faculty a frustrating aspect of his experience that led to increased anxiety. Overall, Mark expressed concern that in order to succeed as a medical student, he would have to accept how stressful the learning environment was because it appeared to him that faculty and the general public assumed it would create better doctors.

Mary. Success for Mary was defined as passing tests and passing classes in the traditional sense of academics. "It's interesting because this is the first time in my life where I have a pass-failing grading system. If I get a 70 percent or a 100 percent, it doesn't really matter. I'm here to master the material." She concluded answering this question by admitting that success for her as a medical student meant that she worked hard and made sacrifices as needed. However, she also described that having meaningful relationships with patients was a key part of success.

While success was defined as a combination of academic achievement and patient connections, Mary considered failure as being unable to stay on top of everything each day especially when the volume of work exceeded the hours in the day.

I feel like I fail in medical school when I have to cut corners to learn the material. I'll watch a video at two times the speed which is fine but it

doesn't feel great. I mean, how is this serving patients to the best of my ability when I'm flying through information about their medical needs? In conjunction with cutting corners in order to learn the volume of material expected of her, Mary also described how the university system has failed to provide adequate services to students as far as psychiatric support and counseling that is both safe, and, without a doubt, anonymous.

Mary stated that

it is very unclear what sort of mental health or psychiatric services we can access without putting our future license in jeopardy. They say it's fine and that no one will ever see that you needed help. And yet they won't just state 'here is what the Minnesota licensure exam asks. This is what most states ask.' I think that's a failure of the school. We don't treat our own very well in medicine.

When I asked Mary to explain what she meant by this, she further described that she had heard about how doctors would go in for therapy and it was perceived as a weakness. Mary surmised that it probably hurt their potential for promotion or to even keep their license if their employers found out they needed psychiatric help. In other words, doctors who sought counseling were looked down on by other doctors and in that situation, "we don't treat our own very well in medicine."

When asked about wellbeing and how she has experienced it at the medical school, Mary did not hesitate when she shared that having a fellow medical school student as a roommate was important. As she explained the importance of this living situation, she described how the long hours and the need for intense studying never

needed explaining or compromise. Mary also talked about paying for an expensive yoga class. “I tell myself that 50 year old me would not be upset with spending money on yoga because it makes me happy. It’s when I don’t check my phone. It’s like a meditation for me.”

Although Mary finds balance and concurs that failure happens no matter how hard students work, when faced with the question about how she has experienced challenges at the medical school, she spoke about finding commonality with people who are conservative with social beliefs she cannot align with in the medical school setting. “I did not expect other people going into rural medicine to have values that are at odds with treating patients from all walks of life. It doesn’t make sense to me.” At the same time, she finds it frustrating that she cannot find time to read the newspaper each day to stay informed about local and global news. “I don’t have the capacity to read the paper and go to medical school. That bothers me.”

Zach. During the interviews with Zach, there were times when his answers were fairly short and additional prompting did not elicit further details. There were other times when he would speak for four or five minutes about a topic. When I asked him how he had experienced success as a medical school student, he said “It’s about passing classes, right? The traditional way. I haven’t really had much of an impact on anyone or done anything with my hands. So. I guess. I don’t know yet.”

When we moved into the second question about failure and his experience as a medical school student, he described the workload and how

. . . it doesn’t particularly seem like it’s anything that’s actually something you can be successful at managing. Maybe you’ll know some things and

some things are just enough to do well on an exam. But I don't know. It seems really easy to fail in medical school in a lot of different ways. You can make the wrong diagnosis. You can say the wrong thing to a teacher. There's all this disagreement.

From his perspective, Zach defined the disagreement as a conflict between students and a variety of entities including professors.

He also defined disagreement between students and how they applied their studies to clinical exams. In the clinical exam, students would need to diagnose a patient but the potential to "get it wrong" was seen by Zach as another level of conflict or disagreement that made medical school challenging. As Zach described his view that these challenges were failures, he shared his background in engineering where problems could be tested over and over again until all of the mistakes are solved before a product is shared with the public. "But you can't test like that on humans. Medical school feels like a battle about information where nobody actually knows what's going on. We make pretty good guesses but they're still only guesses." Zach shared that as an engineer he enjoyed the certainty that comes from testing "until proof it works." In medical school and in the medical profession, he expressed concern that the same certainty did not seem to exist which caused a degree of stress and anxiety. However, he thought that failure might be a part of medical school in order to prepare students for failure in their profession.

Although Zach described failure as part of the medical school experience, he was uncertain about the place of wellbeing beyond the classroom. The one example he shared about wellbeing was when he found himself in a lecture hall with other classmates. In that moment, he and his peers talked about how things were really going for them. "They

admitted they were behind on lectures. That the test didn't go well, and for me, I didn't understand some things." Then, Zach sat back in his chair and folded his arms in front of him and talked about the previous year: the year that the pandemic turned the class experience virtual.

I don't think the school understands what last year was like for us. We had our white coat ceremony. All the speakers lined up and it was total trash. I know that sounds harsh but they should have done some counseling before they decided to speak to us. They talked about their challenges and never acknowledged our isolation; our disconnect. Our inability to make friends with each other. The only person who did was our class president. She got it. I think the school needs to recognize this happened, and they need to say it to us.

The description provided by Zach highlights his perspective that the medical school failed to support the wellbeing of the students who experienced virtual learning.

Zach then spoke for about five minutes when asked about how he had experienced challenges as a medical school student. He compared the obstacles in medicine to those he had observed as an engineer. "Medicine demands a certain omnipresence and knowing a lot of material about a lot of different things. In engineering, you know your field and solve problems." For the majority of the time, Zach spoke about trying to figure out what information was relevant when faculty shared numerous presentations covering a great depth of material. For example, he stated,

Sometimes it feels like the professors are just sharing a stream of consciousness and it's just pools and pools and pools of information. At

the same time, we have maybe 10 or 12 different people writing questions for our tests. Everyone has their own idiosyncrasies, their own way of sharing information. There is little to no consistency in the instruction or delivery of material. One teacher might use a different program from another and it's my job as the student to figure it out. It's so inconsistent.

Throughout the interviews with Zach, he described wellbeing, failure and challenges as a medical school student from an engineering background.

During his first year he attended virtual classes which was a frustrating experience because faculty were not consistent with how they shared the learning materials or how they conducted the classes. As far as wellbeing, Zach focused on communication between himself and his classmates as a prime example when he felt like he had a real connection. This occurred during his second year and he acknowledged that if it had happened in his first year, "maybe I'd feel different." Overall, Zach experienced a high level of stress by not having in-person connections but perhaps it would change during his second year.

In summary, the second interview revealed deeper definitions about the medical school student experience. During their first year, all four interviewees attended virtual classes which created a disconnect between themselves and their classmates. The online platforms that the faculty utilized were not always the same from one professor to the next. In some instances, this created stress and anxiety including the amount of material that professors expected the students to learn. In general, the four interviewees expressed dissatisfaction with their first year and concern that even if they were physically in the classroom with their professors and classmates, they would still experience stress and anxiety because they perceive it as part of the medical school journey.

Interview Three: Reflection and Meaning

During the third and final interview, participants were asked four questions that were influenced by their responses from the second interview (Table 6). This gave them an opportunity to reflect on the meaning of their responses. The four terms as discussed in Chapter Three included success, failure, wellbeing and challenges. These were embedded in the third interview questions. In Chapter Three, the reasoning behind these specific terms included a curiosity on whether or not students would define them similarly or not. This approach required the interviewees to reflect on the meaning of their second interview responses while also considering what was communicated by the medical school faculty and their classmates.

In order to remind the interviewees about what their responses were, some preparation was necessary prior to the third interview. The preparation included the following steps: First, I completed all of the second interviews. Second, I printed the transcripts and read through each one to highlight main points for each participant. The main points chosen were those where the students defined the four terms. For instance, when Mark spoke about his frustration when he forgot simple procedures, he connected this with the term “failure.” I considered this a main point on how he defined failure. In other words, Mark defined failure as not remembering clinical procedures and I made note of it in the transcript as a main point. Third, I organized each interviewee’s main points to tie into the third interview questions. According to Seidman (2013),

The combination of exploring the past to clarify the events that led participants to where they are now, and describing the concrete details of their present experience, establishes conditions for reflection upon what

they are now doing in their lives. The third interview can be productive only if the foundation for it has been established in interview three, we focus on that question in context of the . . . previous interviews and make that meaning making the center of our attention. (p. 19)

During the third interview, I had the transcripts on hand when I met virtually with each participant. I read their individual main points directly from the transcript without summarizing or creating connections that might lead them to reflect in a certain manner. By sharing their literal responses, the participants could reflect on their words and then answer each question as listed below in Table 8.

Table 8

Interview Three Questions

| | | |
|----------------|---|--|
| Question One | Based on your description about experiencing success, how would you describe the role of the medical school? | Follow up question: When you experienced success, what was communicated or what messages were understood from medical school faculty and classmates? |
| Question Two | Based on your description about experiencing failure, how would you describe the role of the medical school? | Follow up question: When you experienced failure, what was communicated or what messages were understood from medical school faculty and classmates? |
| Question Three | Based on your description about experiencing wellbeing, how would you describe the role of the medical school? | Follow up question: When you experienced wellbeing, what was communicated or what messages were understood from medical school faculty and classmates? |
| Question Four | Based on your description about experiencing challenges, how would you describe the role of the medical school? | Follow up question: When you experienced challenges, what was communicated or what messages were understood from medical school faculty and classmates? |

Anna. As the first interviewee for the third and final virtual interview, Anna was available during her lunch hour between classes. She expressed that her morning had been hectic but that her classes had gone well. She was concerned about being late for a 1:00 pm class and we moved into the reflective questions once she shared this detail. When Anna reflected about her success descriptions, she concluded that the role of the medical school focused on outreach from administration who provided space for students to talk with them.

What pops into my head is more of the person-to-person level support and the humanizing aspect. The empathetic aspect of administrators, professors, and whatnot. Dr. [name withheld for privacy] met with me and talked about my goals. There was discussion about competencies and how this was going to be hard. This definitely led to some of my successes. I felt supported.

Anna also described how she would approach new material that felt too dense to remember. For example, while learning new medical aspects was always interesting, Anna found herself determining if the details would lead to further her clinical competencies. “I started to realize that there are details to remember for tests and then there is feedback that my problem solving was successful and that wasn’t measured on a test. There were different levels of success going on.” At the same time, her classmates were willing to talk about how overwhelming the material was to learn. In conversations, they would share that they were beginning to recognize that they could not commit everything to memory; some material would not matter. “Being reminded that it’s a

process because high achieving people who don't like to fail? We need reminders that it's okay if we don't know everything.”

As Anna thought about what was communicated or what messages were understood from medical school faculty and classmates, she nodded and said firmly,

It's not really messages. It's images, impressions from other students that success looks a certain way. They describe themselves as studying all the time. Studying until one in the morning and then up by six to study and then attend class. People want to look like they've got their stuff together.

In comparison, Anna admits that she cannot be that kind of student. She described her approach as finding balance because she is self aware that without it, her anxiety would negatively impact her learning.

There are some faculty that will acknowledge that this is tough and it's going to take a while for this to sink in, to make sense. It's going to take some time for everything to be integrated in a way that fully makes sense. It helps when faculty recognize this and say it.

In contrast to the faculty who are helpful and supportive, Anna clarifies that not all faculty are willing to take these steps or have these conversations to support students.

During the discussion with question two, Anna reflected about failure and the role of the medical school. She pointed out that when she perceived that she failed at something, faculty who checked in on her or her classmates who felt that they had also failed were

normalizing failure and not in an aggressive way, like you're all going to fail! But just normalizing that failure happens as a part of growth. We've

gotten a little bit of that too. It makes me think that the curriculum and the teachings don't have to stay the way they are but there's this tradition. As if medical education needs to look a certain way.

She went into further detail about how medical students expect to fail and expect to not do well during most of their education.

While considering that changes could help, Anna explained that the role of the medical school when she felt she had failed was not always what she needed.

I think there's, there could be a way to help introduce people to how to be competent and resilient in those stressful situations without crushing them. Right now, we get crushed. There's some effort like going to pass-fail but there needs to be bigger structural changes.

As Anna considered the third question about wellbeing, she acknowledged that there were numerous resources shared with students about how to seek wellbeing.

That's a little bit tough sometimes because we're almost over inundated with resources and whatnot. It's like, well, what do we do when we're thinking about student well-being? We just throw a bunch of things at them and they have all these phone numbers and stuff that they could call. As a person who has experienced not feeling well, I know everything I'm supposed to do but I still feel like shit. I can go look for that email with that number but it feels like they put it out there. They offload their responsibility when what I crave is someone to check in on me.

For about five additional minutes, Anna continued to describe the conflicting nature of the medical school role where care and approach were in constant friction. She included

statements that focused on personalizing the student experience and making sure that they felt supported through the campus community. During their first year in medical school, Anna and her classmates experienced regional riots because of the death of an African American man.

We would get an e-mail from four different people acknowledging what happened and they would say ‘we’re here for you.’ But when one of those messages comes from the university president? Am I going to really email her and talk about what’s happening socially, politically in the world? No. After Anna concluded her thoughts about the role of the medical school and her reflection about wellbeing, the final question about how she defined challenges as a student connected her back to wellbeing and general support.

Anna says that “I think making efforts to have conversations about it are going to make students feel safe, to be able to talk about things. So not being alone.” Anna also highlighted a current trend in medical schools to create learning communities. The northern campus medical school integrated a similar system where eight to nine students are paired with a faculty advisor. Throughout the academic year they would meet together and check in on how classes were going. She heard that students were also discussing challenges they were dealing with and obstacles to wellness.

I know people whose learning community mentors have done that but mine has not. I think the idea that community can help overcome the challenges together in some sense, sometimes it works better than others. It depends on how well it’s cultivated, like a safe space that’s open and

that gives you a baseline for communicating. But mine doesn't do that. We just talk about what classes we still need to take.

Mark. At the start, Mark requested clarification when I asked the first question along with his second interview responses about success at the medical school. "Do you mean with the role of the medical school as in where the medical school might go? Or is it their responsibility to make sure students succeed?" I replied that when he thought about his comment from the first interview and how success was not about academic standards, what was the role of the medical school in that setting? From that point on, Mark responded affirmatively and began to describe how the medical school wanted students to succeed.

I think what they want is for us to be, well, what's the word I'm looking for? As highly performing as possible, I guess. I think they want us to get good scores but nowadays it doesn't matter as much.

He continued by sharing details about the newly acquired pass-fail system that obliterated letter grades from his entire medical school experience.

Mark states that "I think medical schools realized how much pressure was put on students. It's reflected in this change. But I don't think it cuts back on the stress. It shifts it." Following this statement, Mark talked for nearly two minutes without pause on how the role of the medical school could ensure success by supporting student mental health and by ensuring that students were embarking on a career path that they enjoyed.

For example Mark described how

The system in and of itself is rooted in kind of an archaic understanding of what people want, which is to perform at their highest. I think nowadays

with this new generation, I don't think that's what people want as much as finding purpose in life.

As the conversation moved into what messages were communicated by the medical school faculty and classmates, Mark stated that he knew from the start that he would need to meet certain criteria:

I have to check certain boxes and everybody talks about how much pressure there is in medical school. I knew that coming in and it wasn't until the second, third, fourth month that you understood what the pressure is, how life encompassing it is and that's just what you do.

When we discussed failure and Mark reflected on his responses from the second interview, he acknowledged that the medical school had done a lot for him in terms of organizing meetings and class schedules. As he considered the role of the medical school from the lens of failure, he pointed out that medical school leaders who are also faculty made sure that he knew that resources were available if he needed them.

I would say that it feels like they think students should suffer to a certain extent. But for the most part, faculty really really want you to be mentally healthy and not feel overworked, overburdened. But it's difficult because there's a structure in place and we have boxes to check off and faculty know we need to do them. I think it just puts us under a lot of stress and we fail sometimes.

He added that he is aware that he does not need to know everything and medical school faculty took on the role of communicating this message.

As Mark described how the medical school reminded students of resources they could lean on for when they failed, his reflection about wellbeing took a similar direction.

You should protect mental health. Basically making sure that students are okay. You're supplying them with a great deal of stress. I think it's really important to make sure that they can handle that stress. I don't think they really do that.

Mark pointed out that the medical school provides outlets for when stress occurs and that the structure supports when students have reached their limit. However, like medicine, applying a solution after the fact does not necessarily eliminate the problem.

It's a lot easier to put somebody on high blood pressure medication than it is to send them to the gym or change their diet. High blood pressure medication is kind of what the school does with wellbeing. People become stressed out and it's leading to suicides, which is a true statistic. Instead of going, how can we prevent this, the medical school is doing damage control just to make sure people can get through medical school.

For the final question about challenges in connection with his reflection about his responses, Mark firmly stated that the role of the medical school should be

to make things as streamlined as possible. There are a lot of different pieces that you have to line up and you have to understand that each professor does it differently. I'm sure it was worse back when schedules were all on paper.

Mary. The role of the medical school with success for Mary included a succinct statement with a laugh: "to make everything easy." Mary divulged additional information

including how the medical school should eliminate barriers and “squash any attempt to create extra hoops.” In reference to the second interview and her responses about success, she maintained that the medical school should attempt to make things easier in order for students to have the time and capacity to master the material.

In connection, Mary considered her statements about failure and emphasized how difficult it can be

to stay on top of everything and this interview? This isn't the only place I have shared my opinion about the role of the medical school. I've shared my feedback and we haven't seen anything. Does anybody actually care? I know that a lot of people have similar concerns but we don't hear anything. I know it'll be contentious to have an occasional town hall meeting with all these mildly disgruntled medical students but we need to be heard. I think that's a failure of the medical school. They're like, this is the way it is.

When I read the transcript statements she had made, I had included how she defined failure as the medical school not providing concrete proof that students who sought psychiatric help would not feel the repercussions during their career.

After hearing her statement, she focused on students being heard and for the medical school to figure out how to restructure the constant barrage of daily tasks outside of academic learning and performance. When Mary considered her responses about wellbeing, she paused and her tone changed slightly.

The onus is on the medical school. We can see the cause and effect. How many deaths by suicide we see happening with medical school students?

We know that medical school is a cause, and I think it's because there is no off ramp if you decide it's not for you. You've spent all this money. There's really no other option except for going into residency. Nobody's going to encourage you to quit even if it's the right thing for you. I don't think that breeds wellbeing.

Mary then spoke for about a full minute about the previous year during the pandemic.

She described how her class “lost wellbeing points . . . how much time we just spent frustrated.” The description moved into possible solutions where faculty could create asynchronous lectures and schedule one day each week where students could study without needing to go to campus for a single class.

As we reached the final question about challenges and the role of the medical school, Mary nodded several times as I shared her direct statements from the second interview transcript. These included her struggle with understanding how students from rural areas going into medicine had viewpoints that clashed with her perspective about inclusive patient care when she herself also came from a rural community. However, she did not comment on this statement beyond nonverbal cues that she agreed with her interview two responses. When I read her statements about how she would like time to read the newspaper each day, she nodded and shared further reflection.

There needs to be better organization. Right now we have some practice questions at the end of Powerpoint slides, some are in a different document in Canvas, others are in a Google form. For the love of God, standardize these things.

Zach. When reflecting on the meaning of success and the role of the medical school, Zach emphasized

I believe the school is ultimately responsible for my success. That doesn't mean I can wash my hands of it. But they do manage it like a boss would and if you're not giving your employee what they think they need to succeed, they will fail. That's on you and that represents your team. I feel the same about the school which is entirely different from what I believe I should do myself but they are not giving us the tools to support success.

Zach continued by going into the balance between chaos and order. He pointed toward his experience in engineering and maximizing growth. When I asked what has been communicated by the medical school faculty, he replied "The school said, 'we want you to be successful, we have resources available.' I don't know. It seems to ring a little hollow when it's via a mass email."

During the second question, Zach appeared perplexed as I read through the transcript from the second interview. He sat back and responded "this is a very long question." I offered to copy and paste the question along with the transcript highlights that I had just read. For a few moments, I worked on this to support his response that it was a long question with numerous details from his perspective. Once I copied the information and sent it to him, Zach read through it, nodded, and thanked me. Since Zach was the final interview of all of the interviews, this process was not repeated for the other students. This was the only interview in which Zach responded that the question was lengthy due to my reading from the transcript.

Once Zach was familiar with the transcript highlights, he readily addressed the question and reflected on his definition of failure and the role of the medical school. He shared that while memorizing a lot of material was part of the process of learning, the “medical school’s expectations aren’t necessarily realistic but the response is always, that’s just how things are and I think that a lot of people have terrible mental health during school.” He also talked about failure as a physician and how patients will die even though as a doctor, the goal is to help manage disease and provide preventative care.

As we approached the third question about wellbeing, I asked if he would prefer seeing the material in written form as we had done for the second question. He agreed that it helped him focus on the details in order to answer the question. For the remainder of the questions, I offered this supplement to support his reflection. When he had read what I sent him and considered the words, he described how the medical school could not ensure wellbeing but “it’s quite apparent when the school’s priorities and individual priorities start to conflict with what’s best for the students.” Zach continued by comparing it to when a doctor writes a prescription even if the patient would prefer not to take the medication. He said that “the doctor did their part and they move on. I think the school does a lot of covering their ass when it comes to student wellbeing. I don’t perceive a lot of the things they do as genuine.”

Zac continued to elaborate by going into further detail by describing an email that went out to all of the students. The content of the message included questions about specific hobbies that Zach enjoyed and the author of the email encouraged readers to respond.

It was a preprogrammed email format with my name inserted into it. There were

questions like ‘How are you doing?’ ‘Are you enjoying new activities like hiking and hockey?’ Guess what? There wasn’t any hockey going on. We were in the middle of a pandemic.

At this point, Zach stood and paced in front of the camera. He did not entirely leave the scope of the camera view. He leaned on the back of his chair and continued to talk about mass emails and how he did not perceive this outreach as helpful. “There has to be something better than automatic emails to support student wellbeing.”

For the final question about the role of the medical school and the challenges that Zach described in the second interview, he laughed after reading highlights from his transcript. “It’s a little cynical.” He then went into depth about how the challenges that medical school students face are a combination of curriculum issues and the poor delivery by the school and summed it in as follows “One could say that they make robust doctors that can handle a lot of chaos. We waste a lot of time trying to find documents because every professor has their own method.”

At the same time, Zach offered details about how there are professors who are fun to learn from because they “take the time and the knowledge and experience to make very concise notes. There needs to be a leader who says this is the process we’re going to follow and has expectations that it happens.” While Zach suggested how improvements could be handled, a series of core themes emerged among the interviewees. In the section below, the themes are analyzed across all of the interviews.

Cross Interview Analysis: Core Themes

When I had completed the interviews with all four of the students, I returned to the transcripts. Prior to concluding the third interview, the only transcripts that I had gone through and highlighted were the second interview documents for all four participants. I highlighted main points that each participant made to support the third interview where reflection of the material was necessary for the interviewee to consider before answering the questions. Even though I was familiar with the second interview transcript by the time I returned to all of the transcripts to analyze, I withheld from subscribing recurring themes or content connections that would lead to categorizing the material. However, once the interviews were done, I carefully read each transcript in search of emerging themes. During this process, I highlighted the printed documents and circled words that consistently appeared among the four students. This process is noted by Seidmann (2013) where

working with excerpts from participants' interviews, seeking connections among them, explaining those connections, and building interpretative categories is demanding and involves risks. The danger is that the researcher will try to force the excerpts into categories, and the categories into themes that he or she already has in mind, rather than let them develop from the experience of the participants as represented in the interviews. The reason an interviewer spends so much time talking to participants is to find out what their experience is and the meaning they make of it, and then to make connections among the experiences of people who share the same structure. (pp. 127 - 128)

Because of the inherent risks that come with interpreting interview responses (Seidman 2013), I read all of the transcripts at the same time over the course of several weeks.

My rationale for doing this was to achieve my goal of seeking an in-depth understanding of what each individual wanted to share while also taking note of commonalities that had as little to do with any bias I might have as a staff person at the medical school. In order to do this, I searched for words that were repeated numerous times by each medical school student. This process led to three categories that took shape and became a thread among the interviewees. These included *self care*, *expectations*, and *administrative barriers*. Each of these core themes will be addressed separately, with the first one being self care.

Theme of Self Care

Throughout the interviews, the medical school students consistently spoke about self care whether the question was focused on success, failure, wellbeing, or challenges. The word 'self care' was defined differently depending on the interviewee. However, the theme took shape as an all encompassing word because of the way participants described it in the interviews. Self care included communication with roommates when things became overwhelming. Self care emerged when interviewees talked about having grace for oneself when failing an exam. The theme also appeared when the medical school students explained how they prefer not dealing with high levels of stress and how they might improve their day to day experiences. Self care encompassed their approach with handling difficult situations. Different interviewees described self care in the following ways.

Anna. During the third interview, where the objective was to reflect on interview two, I asked Anna about experiencing success in the medical school and created connections to self care when she described having conversations with her roommate when she was unsure and overwhelmed with the amount of material she needed to learn. Anna admitted that she felt comforted by her roommate's explanation that learning is layering. "There's the first exposure and then we get it again. It was helpful, and debriefing with friends after exams helps." At the same time, Anna revealed that the interior monologue she runs through her mind, was another form of self care as it helped her step back from feelings of failure. For instance, if Anna did not do well on an exam, she had learned to ask herself if she still gained competency that could not be measured. "The deeper understanding, the problem-solving ability, is a different type of learning and so it's still valid. It's helpful to reaffirm this and just this week it made a difference with how I felt."

As the second interview progressed, Anna described time that she spent on hobbies that were unrelated to medicine. "I really appreciate making good meals for myself and having things from scratch." Self care emerged as she went into details about her puppy, her boyfriend, gardening, and fermenting foods as a way to step out from medicine "and do things outside of class." She also explained how exercise helps her maintain balance. "I do a lot of hiking and sometimes trail jogging, then some yoga and other stuff too for emotional wellbeing." Anna also admitted that it is a challenge to recognize when to step back and consider if she needs a break. This form of self care and the self awareness it demands appeared repeatedly in the interviews with Anna especially when the second interview concluded as she said, "it's harder to know how to have

balance or to engage in seeing patterns; knowing if you're just making it through and maybe you're not comfortable with what's happening.”

When self care emerged again in the third interview, Anna spoke about self reminders and how she needs to give herself advice. “Having those reminders is really helpful in terms of differentiating numerical success from my actual success and learning. Also just being reminded it's a process.” The approaches she described were both internal and external methods of self care.

Mark. Among the four interviewees, Mark had the least amount of comments related to self care. During the 135 minutes that we spent in all three of his interviews, he brought up examples of self care four times. However, his descriptions were robust and the quality of his explanations revealed a depth similar to the other interviewees who talked about self care no less than 12 times with a maximum of 45. While studying the transcripts and returning to the recording, Mark talked about self care for nearly 25 minutes total. This revealed a similar track of conversation as his interviewed peers and a significant reason self care became a theme.

For his first self care description during the second interview, Mark went into detail about his exercise regime and as mentioned in this chapter, he utilizes the recreational campus center when it is not crowded and when he feels comfortable with how other students are wearing masks. For his sense of wellbeing, this was an important part of his explanation and he leaned in closer to the camera when talking through his worries about the COVID-19 virus. This portion of the conversation led to a lengthy description about his friends and how they would invite him to different things and this

became his second self care description. “I’m saying yes even when I have a lot going on. I know I need to do this for my own sense of balance.”

As part of saying yes, he and a few of the other medical school students in the same program began a Dungeons and Dragons group.

It’s fun and an imaginative reality. It’s something outside the school even though it’s with medical school students. I’m completely focused on the game, I’m in the moment. I don’t think about the past or the future, really. I’m thinking about the present and about the board game. It’s making me hyper-focused or something. It kinda reminds me of hanging out with close college friends or back when I was in high school.

Throughout this explanation, Mark smiled often and was less likely to rub his forehead or swipe down from his eyebrows to his chin when speaking. During his other responses to the variety of questions in the interviews, these movements were frequent and could have been a sign of anxiety or discomfort.

However, as Mark talked through how he felt being with his classmates while playing a game, his words “hyper focused” and “in the present” were followed by nonverbal cues including steady eye contact and little to no hand movement near his face. Mentally stepping into a social situation that took Mark from the worries of medical school calmed him even when only speaking about it and reminiscing about the details. This form of self care emerged again in the third reflective interview when his last two comments about self care were revealed.

During the third interview when Mark reflected on his responses about failure, he shared that the medical school currently has a wellness committee. “They talk about

going out and hiking. Some students do it but not everyone.” Mark also mentioned the learning communities where a faculty advisor consistently meets with students and at this point, Mark pulled back from the camera and held his hand against his forehead while speaking. “The advisor checks in with us, you know. We have general conversations about what they do any given week to deter stress, bring it down to a more livable level.” As we approached the third question after he said the previous statement, he continued to sit back from the camera and his left hand frequently rubbed at his eyes and face. When I asked the third question about reflecting on his responses about wellbeing, he described how the medical school

supplies a great deal of stress. I think it’s really important to make sure that they can handle that stress and know how to handle it. That really should be the role of the medical school right now, and I don’t think they really do that.

Mary. Throughout the interviews with Mary, the idea of self care was brought up briefly but numerous times with 24 mentions about how she has maintained her health or seeks self care through two very important mediums: sharing a home with a fellow medical school student and participating in yoga. When it came to self care during the second interview, she spent the most time talking about paying for an expensive yoga class. “I tell myself that fifty year old me would not be upset with spending money on yoga because it makes me happy. It’s when I don’t check my phone. It’s like a meditation for me.” Mary also briefly mentioned that the medical school does not offer to financially support activities like yoga but this comment was brought up quickly without further explanation.

Mary continued to describe her personality as an extrovert and how difficult it was during virtual classes when “we were in lockdown and couldn’t be together.” She is currently seeking self care by continuing to attend yoga classes and knowing she lives in a situation where she can study at all hours without interruption. While her comments pointed to self care, I was struck by the quickness in which she would say things about her mental health including “I have self-motivation, I just gotta keep doing it for myself. I’m doing it alone.” Mary also mentioned self care during the second interview when sharing details about the mental health services provided by the university.

Mary described how she had not

. . . accessed those services because I’m afraid. I feel like I don’t need it that much . . . it could harm my career. I can use my own coping skills to keep my mental health afloat. I’m afraid to use those services, especially those at the school that are free and available to me. What is really confidential when you’re receiving services connected to the place that you go to school and really holds the key to your future?

After this comment, we discussed her yoga classes and she visibly relaxed when describing how her self care cost money but that it was worth it.

Zach. Throughout the interviews with Zach, self care emerged tangibly through one example that he discussed in both the second and third interview: talking with his medical school peers about the overwhelming amount of material they had to learn. During the second interview, he spent about four minutes talking through these details whereas during the third interview, his description lasted about 20 seconds. The fact that he brought up the same example when considering his own definition of experiencing

wellbeing in medical school (interview two) and when considering the role of the medical school (interview three) stood out to me.

Even though I had shared his responses from the second interview transcript and I read the portion about talking with his classmates, he did not readily return to it during our third meeting. He first talked about the school's priorities and how he "doesn't perceive a lot of the things they do [as] genuine." At this point, he detailed the mass email communication where his name was inserted into a pre-written message that relied on an algorithm to include hobbies he had shared in a previous survey sent by the same entity. "Good intentions that are hollow." And then, toward the end of the third interview he added "support from two to three very close classmates that I was lucky enough to know."

During the interviews with Zach, there were 32 instances in which he brought up two additional topics that fit with the theme of self care.

The two additional topics included being near his family and pursuing a profession that matched his values. These topics were sprinkled throughout the interviews with the majority of the descriptors appearing in the first interview when discussing his background and in the second interview when talking through all four of the questions relating to success, wellbeing, failure, and challenges. Zach frequently turned to his experience as an engineer to offer comparisons between the world of medicine and the field of engineering.

When sharing details about being geographically closer to his family, "it was important to me and definitely led to where I applied for medical school." As mentioned in this chapter, Zach had experienced being away from his roots while pursuing his

undergraduate degree and again when he began his career as an engineer. While working in this capacity, he began to recognize an internal struggle with his value system in relation to the life of a well paid engineer. “You can have the big car. The house. I was earning good money but the people I worked with didn’t match my values.” This form of self care and recognizing the need for change followed Zach into medical school as he explained his frustration with the medical school.

You’ve got people with you going through this together. The problem was that last year [during the pandemic] we did a lot of it on our own. My values were in conflict again. But talking with my classmates, being near my family. I’m stoked to be here by the way So what does all that mean? I’m happy doing this. It’s very in line with my values.

The data analysis supports the presence of three common themes: self care, expectations, and administrative barriers described by all four interviewees during the three different interviews. A summary of the commonalities for each theme is presented next.

Cross Interview Analysis: Theme of Self Care

Throughout the interviews with the four medical school students in their second year, the theme of self care transpired in a variety of ways based on the interviewee and their personal experiences. According to the Oxford Dictionary, self care is defined as “the practice of activities that are necessary to sustain life and health, normally initiated and carried out by the individual for him- or herself” (2020). While this provides a broad and general definition, the interviewees shared specific aspects about self care because the very act of it is based on personal preference on how to “sustain life and health.” As each medical school student shared their stories in order to answer the questions that I

posed, they described different acts of self care. These included cooking from scratch, attending yoga classes, enjoying table top strategy games, and talking with classmates when stress and anxiety were paramount.

Although each interviewee shared different aspects about self care, a vital thread brought them together and was revealed through their responses. Each student acknowledged that the path through medical school was challenging and it was up to them to administer self care in order to succeed. Commonalities and connections related to the theme of expectations across all four interviewees will be described next.

From the very first interview with the first student until the last interview with the last student, the theme of expectations was a constant hum. While the term itself can run the gamut of expectations by family or expectations by friends and even expectations by the students themselves, every interviewee chose to share their perspective about expectations in connection with the perceived idea that friends, family, medical field employees (i.e. practicing doctors, nurses), and even medical school faculty clearly communicated that medical school students should *expect* their educational experience to be challenging, stressful, and difficult. Specific examples from each of the interviewees related to the theme of expectations are included in the next section.

Cross Interview Analysis: Theme of Expectations

This section includes specific examples of how all four interviews conceptualized expectations during the three interviews and the connections they made to well being and the medical school experience.

Anna. Throughout the three interviews, there were 20 statements that pointed toward expectations. Anna often commented about the pressure that was ever-present

especially when she was first applying to medical school. In the first interview when she was sharing details about her background, she commented “There’s this constant idea that it’s going to be impossible to get in and an expectation that I will just suck it up and apply again and again and again if I don’t get in the first time.” Prior to making this statement Anna had described the application process.

Anna explained that when medical schools started going over her materials, she was invited to interview at one of them and afterward she spoke with an interviewer who had also coordinated the meeting. This person shared with Anna that the only hold up was her lack of clinical experience. Anna described her work as an EMT wherein the interviewer responded that that did not qualify as the experience they were looking for from applicants. The interviewer then asked Anna if it was the first time she had applied to medical school and for Anna, it was the first time as well as what she hoped was the last time. However, the interviewer shared that Anna could always apply again.

In the following quote Anna explicitly describes why she did not want to do a second medical school application process.

That would mean that I would have to take the MCAT again. I’d have to go through all the hoops again. This is a mental burden. A cost burden. I was very offended about it and it stuck with me because it was like, do you think nothing of my time and energy? The flippant response from the interviewer ‘oh this is your first time? You shouldn’t expect to get in your first time.’ What is that? Why is that?

As she continued to share during the third interview, she returned to the theme of expectations when she described the depth and breadth of the information that she and her classmates were expected to learn.

I think a lot about the fact that I don't think the curriculum and teachings have to stay the way that they are. But there's been a tradition of medical education that looks a certain way how fast it goes and how much information is processed. But when I think of it, why do we have to do it this way?

At this point, Anna looked down when she was most often an interviewee who confidently looked into the camera when speaking. While looking down from the camera she admitted that if medical school could slow down, even if it took a few more years to complete,

I personally would be willing to spend more time to have it be a little bit more spaced out, to let it sink deeper. So many people want to push through and get to the practice as fast as possible. But why are we expected to know all of these things right now? People talk about medical school like it's a fire hydrant. There's been a tradition of this and it's almost like stress testing the students. I don't see much value in it, frankly. I think it's more harmful in a lot of ways.

At the end of this sentence, she looked up again and continued to talk about feeling frustrated that it seemed as if no one wanted to try and change the current mode of teaching.

Continuing to talk about the current model of medical school teaching she reiterated a question she had asked before, “Why is this how it is? Do we have to keep doing the exact same thing we’ve been doing for decades and decades?” Anna pointed out that faculty, students, and medical employees have told her that the stress of medical school is part of the experience. “They tell me ‘oh well, that’s how it is’ but it crushes a lot of people. There could be a way to help introduce people to how to be competent and resilient in those stressful situations without crushing them.”

During the following moments after a brief hesitation, she once again correlated medical school with a fire hydrant, a description she had heard from experts in the field and it was one that fit well after she had made it through the first year and had begun the second year.

Professors also tell us that we’re just going to be under a lot of stress and there’ll be a lot going on all the time. And so we need to be able to handle that and for me, that message, that makes me feel horrible because that’s not what I want in my life. I don’t want to feel stressed and wrung out and empty.

Anna also compared the amount of emails that students receive and how faculty reassure them that they need to learn how to deal with checking messages.

We need to be super competent and on top of it all the time because we’re going to be doctors and that’s why they’re doing all this to us in medical school. If you can’t do it, then you probably shouldn’t be a doctor because that’s just going to be how it is.

Like Anna, Mark also talked about expectations during his interviews.

Mark. From the start, Mark talked about expectations especially when he spent two years building his resume by working with physicians.

I remember thinking wow, it's weird that so many physicians are telling me not to go to medical school. I wondered . . . it insinuated a downside of the medical field . . . How difficult it is to navigate, how much more there is to do than just medicine.

During his second interview when I asked Mark the fourth question about challenges he had experienced while in medical school, he attempted to answer the question a couple times, paused, and then said, "Well, I feel that medical school is a 'Kafkaesque bureaucratic office.'" He went on to explain that the current structure of the medical school was "draining" and while he would like to offer a solution, this was his first time through medical school. "I don't like the way the system is set up. I think there's something wrong." A few minutes after sharing his discomfort with professors using any program they wished to present lecture notes and additional material to learn, he spent about three additional minutes talking about conversations he had had with those already practicing medicine.

What it feels like in general . . . there's this idea that you should struggle in medical school which is weird to me. Why do physicians talk like that? "Oh yeah, yeah, you're in medical school, that's what happens in medical school, builds character" or something like that. It's like some rite of passage and I don't think it's needed or necessary.

As we approached the fifth question during his second interview, I asked if there was anything else that he would like to share.

At first Mark said no and then corrected himself.

Yeah. On second thought. I just want to highlight that I don't understand why people enjoy the stress and frustration of medical school or the idea that it should be stressful and frustrating. I think it's going to be hard work but hard work doesn't necessarily equate to decreased quality of life.

Mark continued to discuss how most people seem to believe that if you put people in stressful situations, they will learn to manage stress better.

However, he emphasized that he did not believe that people learned good management skills when under lots of stress.

Rather, we should learn techniques to manage stress . . . like I need to know the foundations of what stresses are, different types of stress and working on how to handle them. How to notice our own stress and what resources we have but that's not really taught. It's more like just put this person in the fire and they can put it out while in it. It's kind of weird to me, there's this general consensus.

While reading through the third interview transcript, I noted that Mark mentioned the word "expectations" 17 times and these comments appeared in every response to each of the questions during this particular interview.

Mark's focus on what others had told him including faculty and practicing medical experts was consistently centered around the high stress level that stemmed from a long tradition where it was expected to occur.

So I knew that coming in and it isn't until the second, third, fourth month that you understand what the pressure is, how life encompassing it is and

that's just what you do. I knew about that and the idea that we need to suffer. A lot of that was communicated to me . . . but what other program could I go into if medical school didn't work?

Like Mark, Mary also described expectations during her interview.

Mary. While Mary mentioned expectations, her interviews garnered the fewest descriptions that pointed toward the idea that she should expect medical school to be challenging. Nonetheless, the theme appeared in all three of her interviews including when she shared details about her life history. As Mary described how she arrived at her current medical school, she talked through the application steps and when she made it into the program. "I'm grateful that I'm here but you have to try so hard. You jump through all the hoops and you still have to cross your fingers hoping that it will work out." Another expectation Mary described during the second interview was related to a typical day in the life of a medical student. The expectations of a typical day included watching lectures, studying the material, figuring out what needed to be completed and when but lacked time to plan things out on numerous days.

I'm going to do it again tomorrow and the day after that. I knew that before getting into medical school and people said you can't take breaks from it. It boiled down to everyone expecting it to be hard and it is, and we just accept it.

Even though Mary spent more time discussing the other themes, the third interview provided space for her to go into greater detail about expectations.

During this interview Mary delved into the idea that once someone makes the choice to go into medical school, "there's really no good off ramp . . . to do something

else. You've spent all this money. There's really no other option except for going to residency and becoming a doctor." At the same time, she pointed out that even though there were times the challenges were so daunting, "there's not a lot of time to consider where you're at because we're so busy, because there's so much expected of us. Our schedules are intense and that's just how it is."

Like Mary, Zach interviews also included descriptions that were connected to the theme of expectations.

Zach. It was not until the second interview that Zach brought up expectations but when he did, he spent four minutes talking about the difficulties and challenges that are expected to take place in medical school. In addition, he spent six minutes sharing details about the frustrations that occurred when he and his classmates dealt with virtual classes; how they expected a high level of stress but they did not expect the lack of support that occurred when they were isolated from each other.

The only problem with last year was that it seemed like we were doing it all ourselves. We went into medical school expecting it to have challenges but not that there would be a total lack of support or anyone saying they understood what we had gone through, alone.

During the same six minutes, Zac described how most people who pursue a medical degree enjoy challenges.

I think that people like to take on the challenge of medicine, they're looking for it and they want the impossible problems. You walk into medical school knowing you're going to face strife and difficulty in school and in your career. And we all know that it never gets easy. I don't think it

will ever be easier. You'll get better but not easier which is why I'm critical of the setup, the system.

He continued to explain how the current model produces effective doctors but mainly because "you have to fail over and over and over again and everyone knows that's the reality."

When we met again for the third interview, Zach leaned into the theme of expectations during the second question when I asked him to reflect on his experience with failure. After explaining how difficult it was to manage the material he needed to learn, he sat back in his chair and thoughtfully added

the first year destroys relationships but it seems to destroy everyone's relationships. You come into medical school and everyone just knows that's how things are especially with failure. A lot of professors say that and they know a lot of people have terrible mental health during school. They expect it to happen. Why in a role where you're expected to heal people do they also expect you to fail?

Based on my data analysis while the number of times varied between the interviewees, the core theme of expectations appeared consistently. There were multiple times when each medical school student acknowledged that they went into the field of medicine fully prepared to face the stress that others had told them about as they thought about the degree, applied for the education, and even while attending their classes. It also became apparent that a strong thread tying this theme together with each participant was the idea that a different structure would help future students deal with perceived negative expectations. While only one interviewee offered a possible solution, namely extending

the amount of time it would take to finish a medical degree, all four echoed the same sentiment that the old way was not the best way. The final core theme, administrative barriers, is addressed in the next section.

Cross Interview Analysis: Theme of Administrative Barriers

During the data analysis the third theme that emerged with striking clarity and consistency was the idea of administrative barriers. For the medical school and based on the student interview responses, administrative barriers were defined as tangible issues that increased frustration, difficulty of access to materials, and to a lesser extent, kept students from being their best versions. While all three themes discussed in this chapter were mentioned by the interviewees, administrative barriers ranked the highest as far as how often it was brought up by the medical school students. The explicit details were similar between the interviewees and the examples were few but they were consistently the same between the four students.

Although the interviewees discussed the theme of administrative barriers on numerous occasions, they did not mention this during the first interview. The introduction of this theme occurred during the second interview when I asked students the second question, how have you experienced failure as a medical school student? For the most part, they responded with similar answers: not passing an exam and failing to remember everything they had learned. However, something else materialized during their responses. Each interviewee also talked about how the medical school had traditional standards in place that temporarily barricaded them from success. Whether it was an instructor who did not post notes until the day before an exam or how each instructor

could share their assignments on any digital platform that they chose, the interviewees perceived this as a failure they had to deal with while pursuing their degree.

When I met with each interviewee for the third and final interview, administrative barriers became the main theme for nearly every response to the five questions. As mentioned earlier in this chapter, the third interview is meant for reflection and deeper consideration is given to responses from the second interview. Interviewees were asked to think about how they responded to questions about success, failure, wellbeing, and challenges. In connection with this, interviewees were also asked to consider the role of the medical school as far as their individual success, failure, wellbeing, and challenge responses. While the responses included the theme of administrative barriers and it solidly fit with the question, it was not until the third interview when the interviewees went into specific detail and at some points, at great length, to explain how the role of the medical school was defined through examples of administrative barriers. Specific examples from Anna are presented next.

Anna. During the second interview, it was not until the final question was asked that Anna mentioned administrative barriers. When I said, “So, we’ve covered successes, failures, challenges, and wellbeing. Is there anything else in those categories that you’ve experienced that you’d like to share?” Anna responded,

Okay yes I found out about resources that could have helped me last year when we were isolated. I found out about some things that were supposedly resources for us at the end of the year. I would have used them but the year was almost over. It was frustrating to find out so late that there were things to help us.

She explained further that the resources were meant to support student wellbeing. There were counselors and workshops that she would have been interested in connecting with but by the time it was communicated with her and her classmates, either the workshops were over or it was too late to reach out to counselors because the semester was drawing to a close.

As we began the third interview, Anna immediately responded with more details about administrative barriers when reflecting on her second interview responses about success.

We need more qualitative reviews and feedback. Re-framing the understanding of what success is for students. More of that understanding, empathetic, qualitative feedback they can give, the more helpful it is for us. Right now they don't do that and it keeps us wondering if we're succeeding.

Additional details that emerged included how faculty do not check in with students or reassure them. For example, when students do hear about resources to help them with wellbeing, Anna described it as over the top and too much.

There were a few days last year where I felt totally overwhelmed and out of commission but I was still supposed to do school and still keep up on stuff. I really couldn't but I didn't feel like there was a space where I could message "hey, I'm incredibly overwhelmed, I can't do anything." You can't take a sick day in medical school or you can't take a mental health day because it just piles up because the deadlines don't change.

As Anna continued to describe how administrative barriers made it impossible for her to consider a sick day, she also pointed out that the solutions would not be too difficult.

“Maybe a deadline could be expanded? But exam dates? I don’t know. I never felt like I could personally ask. I didn’t feel legitimate asking for myself.”

About halfway through the third interview, Anna also described the first year experience where the first week of orientation where medical school students attended virtual workshops, general virtual activities meant to connect them with each other, and virtual seminars led by medical school administrators and faculty members. Among the virtual workshops, Anna recalled how they were sent to virtual breakout rooms to discuss racism and impacts of racism during the pandemic after a regional crime had occurred involving the death of an African American man.

This created a lot of discomfort. We didn’t know each other at all. I mean, I was impressed and glad that those topics were out there right at the beginning and acknowledging that it’s in the world. But it was just tough because all of us thought “do they even know what’s going on right now with us?” It seemed like they were blindly ignoring some things. There needs to be more effort to incorporate understanding of social determinants of health. Not only for our patients but also for physicians and physician well being. I think it’s getting talked about more than ten years ago but it didn’t happen during our virtual year.

In connection with the workshops that Anna attended with her classmates, all of the students were assigned a learning community with a faculty advisor.

As mentioned previously in this chapter, the learning community group meetings were an opportunity for the advisor to share information that they felt was important.

It can be frustrating. I think it's useful because as students we can give each other affirmation. We can collaborate with questions we ask [the advisor] but it's always academic. I know people whose learning community advisors check in on their wellbeing and mine has not. It depends on how well it's been cultivated in a safe space that's open and supportive. But there is no consistency. Some of the structural, systemic things -- they are not consistent.

Anna concluded her final interview by sharing that the role of the medical school should be to create parameters where all of the learning communities should have the same approach and it would benefit student wellbeing. Like Anna, Mark also included descriptions that were categorized under the umbrella of administrative barriers.

Mark. Although the theme of administrative barriers appeared briefly in the second interview for Mark, especially when he described how faculty could share material in any way that they wished, his third interview contained the most detailed information about administrative barriers.

From the start, Mark shared his concern about the learning communities.

The faculty advisor can do anything they want to during those meetings. I've heard that some advisors talk about wellbeing and how things are going with stress levels. Dr. [name withheld for privacy] does not talk about those things at all in my learning community.

He continued by explaining why that might be the case.

Mark notes that while some faculty are also practicing physicians, others are completely academic and either no longer practice medicine or never did.

Clinical people are definitely better at bringing up the subject of stress and talking about “hey, how is medical school going?” While the academics are more like, “let’s get through this information and get on with it.” There is no consistency.

At the same time, Mark acknowledges that

there are faculty who would listen but what student just goes to any faculty when they aren’t doing well? The fact of the matter is that the system puts pressure on you and forces you to take on more and this puts you into a bad mental state.

This ‘system’ included administrators as well as faculty members that Mark described as providing a service. I mean, I did pay for this, but they should not be trying to give me PTSD or put me in traumatic situations. I do think a lot of professors don’t agree with the current structure but aren’t sure how to change the system or impact that change.

In addition to Mark, Mary also provided a number of examples related to administrative barriers.

Mary. Even though Mary commented on administrative barriers when sharing details about her experience with the MCAT, these hurdles were not through the medical school where she attended classes. For Mary, the theme of administrative barriers appeared immediately during the third interview when I asked her to reflect on her responses about success. “There’s this false sense of support. They say they have

psychiatric services but what does that mean? No one actually explains what that means. Give me an example of that.”

As Mary continued to explain, she also brought up the learning communities with the faculty advisor.

Mary also described feedback provided by medical students regarding the learning community meetings.

We’ve given a lot of constructive feedback about them. How to change them and yet they remain the same. They haven’t done anything. They’ve acknowledged that it’s clear we don’t like them the way they’re currently run, but they haven’t made any changes I think there are a lot of times the school doesn’t consider our wellbeing.

In connection with this, Mary included how there was a lack of consistency across the board for faculty to share lecture notes and reading materials.

For Mary this meant that

The core structure needs to be changed. The next course I take won’t be the same as the last one as far as how the instructor shares the information. I’ll have just learned the rules of the road for every course I had and then it changes, everything changes all the time and you just spent all that time understanding the previous changes. After I took my first course in medical school, I should know how it all works. I should have no more adjustment period. But that’s not the case at all.

In addition to Mary, Zac also provided a number of examples related to administrative barriers.

Zach. “I’m very aware that maybe ten percent of the faculty have met me. The other ninety percent? They’ve never met me. So yeah. There’s a disconnect,” and during his second interview, Zach reiterated the statement that administrative barriers before, during, and after his first year in medical school were prevalent, especially the lack of interaction between students and faculty. “Maybe it was because it was virtual. But this year hasn’t been that different [in person].”

During his third interview, Zach mentioned that the school as a whole was “failing to uphold their side of the educational agreement.” He further explained that while administrators and faculty expressed their concern, they

rarely if ever ask in person. It is always through mass email and not when we’re in class or anything else So how much do they really care?

There’s a huge difference between what is said and what is done.

Zach also described the amount of material that students were expected to remember.

As Zac talked through this aspect, he concluded that there were times when it appeared that faculty wanted him to

memorize this to pass the test and you’ll never use it again. These are just things to memorize. These things you just have to know that don’t matter.

There’s a fairly significant acknowledgement of how medical schools’ expectations aren’t necessarily realistic but that’s just how things are.

Beyond memorizing facts, Zach had issues with emails sent out regarding student well being.

Zac reiterated that the school would share emails listing resources if students needed help.

Everyone's more than willing to send you emails with the resources available. Yeah, we get it. There's resources. That's a far cry from actually supporting someone's wellbeing. It's like if my sister felt suicidal and super sad and it's like me saying "hey [sister's name], just text this hotline." No, it doesn't seem genuine and it's like, well, how do you close the gaps? There's a lot better ways than mass emails.

After reviewing the interviewees descriptions related to administrative barriers, the following was apparent to me.

While the theme of administrative barriers held a consistent place among the interviewees' responses, the similarities with how they described these barriers solidified its existence. The four medical school students shared common ground when explaining the massive amount of knowledge they were expected to learn. They each acknowledged the challenges presented when faculty did not have a streamlined process to share the curricular materials. They also described similar experiences within their learning communities where their advisors did not inquire about their wellbeing even though a few of their classmates shared that their advisors did within the learning community environment.

Throughout the third interview, administrative barriers placed highest as the more likely response in reference to all five of the questions. The students expressed frustration about the lack of consistency and how it barred them from feeling or knowing if they were successful while pursuing their studies.

Chapter Four Summary

Throughout this chapter, two platforms of data were discussed: a survey that went out to medical school students between 2016 - 2019 and a series of interviews based on Seidman's (2013) three-part process to hear and learn about participant experiences. The survey results revealed an overall wellbeing score total based on respondents selecting how much or how little they agreed with the survey statements. The individual score total for the survey respondents indicated that nearly fifty percent of the medical students reported a positive sense of wellbeing. However, the other half had either a neutral or negative sense of wellbeing.

The interviews, on the other hand, produced details that revealed common themes wherein the four medical school students illustrated how they experienced success, failure, wellbeing and challenges at the same campus. The interviews added an additional dimension to the lived experience of medical students whose first year was impacted by COVI 19 pandemic.

The interview method included my meeting with the four students separately three different times. Each interview had a series of questions that delved into the life history of each person as well as their experiences at the medical school. Through the process of interviewing, there was an increase in reflective questions that required in depth responses that the survey could not produce. The evolving paradigm of the interviews led to three themes which were *self care*, *expectations*, and *administrative barriers*.

As I read the transcripts, I looked for patterns and commonalities that helped shape the definition of what it means to be a medical school student. At the same time,

the patterns revealed answers that pointed back to the primary research question: *How do medical school students describe their general state of emotional well-being (or emotional state) while pursuing a medical degree?* The overarching themes also helped define answers to the secondary research questions: *What do medical school students' descriptions of emotional well-being reveal about the nature and presence of burnout?* And, *What types of support do medical school students suggest the medical school provide to enhance their emotional well-being?* In the following chapter, a discussion about the results will include a summary of the conclusions, limitations of the process, and recommendations for further research.

CHAPTER FIVE

Findings

An Introduction to the End

In 2020, I wrote the introduction to this paper and two years later I am completing the conclusion. This milestone is poignant and promising in that I have completed a lifelong dream that I had shared with my older brother many years ago when he was still alive. He was always a key motivator when we were kids and as we went our separate ways as young adults, his influence was constant but I still do not know if he ever realized it.

In Chapter One of this dissertation, I shared the traumatic loss when he committed suicide. I had grieved in dark places for several years to finally emerge with a driving desire to heal. I created an undergraduate class that focused on supporting students and their wellbeing. I wanted to share what I had learned through experience and education; resources to find help if students found themselves lost and overwhelmed. As I taught the course, I was also pursuing my doctorate degree which led to the thesis of this project. There were moments of robust revelation but also moments that slowed down as I took the time to meet with current medical students during the qualitative interview phase of my research.

During the one-on-one virtual interviews, I discovered a deep well of narrative and meaning as the medical students shared their origin stories and how they were faced with a challenging educational journey in order to achieve their medical degrees. I also discovered that the history of medical school burnout was a topic beginning to emerge

amongst experts in the field. It was becoming a recognized platform on which concerned educators were stepping up and emphasizing that the health and wellbeing of future physicians is more than important. It is the difference between life and death; a soul stalled or a soul flourishing.

Interpretation of Findings

Throughout this study, the research questions have been at the heart of the literature review, the search for relevant data, the discovery of data, and the analysis which revealed common themes among four medical school students. In this chapter, the discussion focuses on how the data supports and informs the primary research question, *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* and the secondary research questions, *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?* and *What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?* This chapter also dives into the limitations and recommendations for further research and begins with an examination of the first research question.

Data Findings for the Primary Research Question

The primary research question asks *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* In chapter four, the nine questions in the 2016 - 2019 survey focused on student wellbeing and how they might feel when experiencing or not experiencing wellbeing (Table 1). The survey questions approached wellbeing from a variety of different angles such as exercise, diet, time with family, and if students felt well rested. This approach

aligns with Drolet (2010) who outlined that “physical, psychological, social, and environmental” (p. 107) elements define “wellness” or, as for the purpose of this study, “wellbeing”.

In the 2016 - 2019 survey, the forced responses that students selected included a spectrum ranging between strong agreement to strong disagreement as illustrated in Table 2. The administrators of the survey attached point values to the responses where the higher the score total, the higher that students agreed with the forced response statements. As discussed in chapter four, 4,747 students responded to the survey. The lowest score total was nine with 15 students ranked at this level. The highest score total was 45 with 113 students ranked at this level, and 370 students had a score total of 36 out of the maximum of 45. One key outcome included that nearly 50% (2,349 out of 4,747) of the students ranged between 32 - 40 for a score total.

Based on the forced responses where the higher score total denotes agreement to higher wellbeing, most medical school students surveyed experienced a solid rate of wellbeing while attending medical school. In fact, the forced responses revealed that half of the students define their general state of wellbeing as fairly positive due to their lifestyle choices (e.g. connecting with friends and family as well as contributing to volunteer causes). For the 2,398 respondents who score on the extreme opposite ends of the scale, the data would require an experienced analyst to discern the number of students and their unique responses in order to reveal commonalities. For example, how many students responded ‘strongly disagree’ to the prompt that questioned their connection with friends and family? Due to time constraints and the need for a practiced analyst, the ability to glean additional information that would explain the status of student wellbeing

within the framework of the survey alone was inhibited. The reliability of the survey would improve with additional study and analysis of the student responses.

Although the survey responses provided a general answer to the first research question about how students define their state of wellbeing, the three-part interview process with the four medical school students went deeper. The interviews created a layered, more thorough answer to the research question. While the forced survey answers limited how students might respond, the interview responses were dependent on the willingness of the students to share personal details.

Analysis results revealed that interviewees' responses were similar to the 2016 - 2019 survey. The responses supported that wellbeing was defined as attainable through exercise, diet, and getting enough rest aligned with only three of the interviewees. Zach indicated that he could talk with classmates when feeling overwhelmed, and that he developed personal wellbeing by talking with his peers and with faculty members. The experience that Zach described is similar to the research by Drolet (2010) where students report wellbeing through positive social interactions with each other and with medical school faculty.

On the other hand, Mary believed that her wellbeing was enhanced by attending a yoga class that she gladly paid for while Anna described time with her boyfriend cooking meals, gardening, and fermenting foods as necessary to enhance her wellbeing. Mark reiterated several times that exercise was important to his wellbeing while pursuing his medical degree. Their responses informed the primary research question *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* by identifying similarities in their descriptions with

what helped them maintain emotional wellbeing while also including differing individual interests that fed their wellbeing. This created a narrative about how medical students address or maintain their wellbeing. In the next section, the secondary research question is explored through the data results.

Data Findings for the Secondary Research Questions

In pursuit of understanding the current medical school student experience, this research project also focused on two secondary research questions: *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?* and *What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?* The 2016 - 2019 survey provided a glimpse of medical school student definitions of wellbeing. Although the survey responses revealed how the university administrators defined wellbeing (e.g. through exercise, diet, connecting with others, and additional variables that they included in the nine questions), the respondent score totals shed very little light on how students describe their own wellbeing; however, the responses from the four students during the three-part interviews revealed robust details about the nature and presence of burnout as well as how medical schools enhance student wellbeing. It was not until the three-part interviews took place that a broader and richer portrait emerged. During the interviews, the four students described wellbeing from their own perspectives and answered the question, *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?*

Interviewee perceptions of the nature and presence of burnout

In order to maintain her own wellbeing, Anna shared how she needs to exercise. In addition, she described how she met with a therapist. She also considered it necessary to continue exercising, doing well in school, and meeting with her therapist to avoid reaching a state of burnout. From Anna's perspective, gaining competency with new material was "a success and an accomplishment that led to a sense of wellbeing" (Interview, October 13, 2021). Anna commented that when she did not gain competency, she was unsure of her success and did not experience wellbeing when that happened which aligns with the research of Maslach and Leiter (2010) where burnout for students includes "a sense of ineffectiveness and lack of accomplishment" (p. 103).

Mark described wellbeing as maintaining a healthy diet, getting exercise, and feeling rested from good sleep. He also spoke about his dismay with how his peers seemed to enjoy the stress of medical school. When thinking about the secondary research question, Mark added another layer of depth to the story of the current medical school student: "stress is not admired or appreciated" and in this, Mark reveals that the nature and presence of burnout exists but it is not welcome. This perspective aligns with Jennings (2009) whose study revealed that stress and anxiety "is not a benign rite of passage but a painful and disorienting experience with serious potential consequences for a student's health, professionalism, and patient care" (p. 254).

Similar to Anna, the third interviewee, Mary, admitted that her sense of wellbeing as a medical student meant that she worked hard and made sacrifices. Pagnin and de Queiroz (2015) also note that medical school students had a stronger sense of wellbeing when they did well with their studies and students reported a better "self-esteem, positive

feelings, personal health, and learning ability” (pp. 4-5) when they excelled academically. As described in Chapter Four, Mary also shared that a medical school student roommate brought a sense of wellbeing into her otherwise busy life. In fact, wellbeing for Mary was enhanced when her classmates not only empathized with the stressful learning environment but also experienced medical school stress themselves.

The final interviewee, Zach, shared that wellbeing is established during the times when he could talk with classmates about material he did not understand. This response added to the growing depth of information that continued to answer the secondary research question. The nature of burnout could potentially be a problem if students are unable to connect with each other when stress and anxiety first begin to appear. This is especially noteworthy when considering the two-year isolation during the pandemic. Zach recognized that the disconnect between his classmates and himself created a challenging learning experience amplified by virtual classes.

Secondary research question number three

While all of the interviews revealed varying perspectives about wellbeing and burnout, the third interview included lengthy descriptions validating the third secondary research question: *What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?* The four interviewees agreed on two distinct aspects that helped inform the secondary research question.

The first aspect is that in order to enhance emotional wellbeing for the students, academic processes need to be streamlined. The second is that administrators should not send mass emails to students to feign support for their wellbeing. In addition, all of the interviewees pointed out that faculty could share materials on any program and that it

took time to learn each faculty's preferred method. For these students, this was frustrating thus decreasing their sense of wellbeing. In connection with this, all four of the interviewees spoke at length about how much information they had to learn every single day. This included comments about how some material was learned simply to pass a test. Other comments focused on the inability to take time to soak in the information. An additional critique voiced was the students needing to increase the speed of videos in order to get through them. Their responses align with Dunn (2008) who addressed this aspect of the medical school experience by pointing out the speed at which medical students had to learn incredible amounts of memorized material while balancing life demands and how it can lead to student burnout. "Students spend many hours in lectures, labs, review sessions, and independent study. Many students consequently spend less time in health-promoting activities, such as exercising and socializing" (p. 46).

The second aspect was that all four interviewees articulated that medical school administrators could eliminate the number of mass emails detailing how administration cares, and instead, create time to directly connect with students without students needing to take the first step. For example, in an interview with Anna, she specifically said that she herself could not do the asking when she needed support. Thus it can be inferred that she would benefit from faculty who could offer help and she might benefit from opportunities in which she could share her feelings. By creating opportunities for students to share their current emotional state, faculty could enhance their emotional wellbeing. This aligns with Kern-Bowen & Gardner's (2010) research where they found that academic and social connection is imperative for students to establish a sense of

wellbeing. Additionally, their research states that when students reported higher levels of stress and anxiety, they did not feel connected to their academic community.

In addition to the two aspects, the four interviewees had varying responses that overlapped with each other. Anna concluded that the role of the medical school should include making time for hard conversations. Mark emphasized that faculty should check in to make sure that students were on the right career path. Mary echoed Mark's perspective by pointing out there are no alternatives for students if they decide that a medical degree is not for them. Zach reiterated the idea that faculty should have one method to share materials with students, but Zach was the only interviewee who mentioned that this change needed to come from those in higher positions of power and authority.

The core themes discovered during the analysis of the transcripts also answered the secondary research question which related to their suggestions about what the medical school should provide in order to enhance student emotional wellbeing. According to the medical school students interviewed, self care and the administrative barriers they experienced challenged their wellbeing. In the following paragraphs, the support that the interviewees highlighted as having the potential to improve their wellbeing are described.

Self care

The data revealed that self care for these interviewees included the campus resources that are available for students to exercise or seek anonymous counseling. While these services exist for students, the interviewees commented on other aspects that would have helped improve their self care. One interviewee reported that she felt she could not take a sick day because the coursework would be unrelenting and the challenge of

making up for any absences was not worth requesting a day off. This confirmed Dunn's research (2008) where he noted that if a student needed time away while attending medical school, the absence itself became priority thus academics took a backseat which led to student burn out at a faster pace. When this happened, medical school students felt they could not keep up with the volume of coursework expected of them during a personal crisis. Dunn concluded that "medical schools' administrative and advising structures must work with students, first, to acknowledge directly the reality that these stressors can and will occur, and second, assist as much as possible with handling such crises when they do arise" (p. 46).

Administrative barriers

Interviewees also commented on how they expected medical school to be hard but that the administrative barriers were too often the problem. In fact, interviewees felt that stress appeared to be created in order to shape potentially competent doctors. The interviewees also pointed out that the medical school could enhance their wellbeing by offering tangible class time to discuss ways to handle stress before stress occurs. Although students reported this would be helpful, Ishak (2013) recognized that there are drawbacks to these potential solutions including that some students might not see the need to learn and practice wellbeing skills. In fact, if medical schools create a structure that makes wellbeing programming a mandatory addition to the curriculum, it may create anxiety and depression because it is one more thing that students will need to accomplish.

While creating a curriculum that could reduce anxiety and depression could be helpful, the research in Chapters Two and Four also reveal that burnout occurs in students and it is defined as specific behaviors and responses including emotional exhaustion

(Dyrbye, 2006), unmet needs, and a decreased sense of worth (Jennings, 2009). The interviewees pointed out that if faculty could take the time to teach them how to deal with stress and anxiety, they could potentially avoid burnout. According to Jennings, “a responsibility to make student wellbeing an important educational priority” and to scrutinize a curriculum that absolutely prepares a scientific mind but unfortunately, fails to embrace the human condition of the physician (pp. 254 - 261) is an important undertaking that medical schools need to consider as part of the educational experience. Ishak et al. (2013) recommended that medical school programming integrates topics about self-care into the existing curriculum. Ishak et al. also reveal that medical schools should encourage students to be aware of burnout symptoms and what can lead to them.

As burnout could potentially become a part of supportive curricular change, medical schools are a unique system where the curriculum and programming could integrate the promotion of “self-care skills, instituting wellness interventions, and educating students about preventing and reducing burnout” (Ishak et al, 2013, p. 244). Dyrbye et al (2006) also say that it is important to understand what burnout is and how it takes shape because “personal distress influences the care physicians deliver patients” (p. 381). If students and doctors are experiencing burnout, they may find themselves apathetic and patient care can be compromised. Thus, learning these skills during medical school could lead to their ability to implement them when practicing medicine as physicians. In fact, several of the interviewees pointed out that dealing with stress after it has happened potentially taught students how to mismanage stress. For example, Mark stated that unhealthy responses led to unhealthy habits when anxiety and stress peaked. This connects to Jennings (2009) who cites that students who detach themselves in

medical school in order to deal with stress tend to become physicians who are detached. The implications of this can lead to burnout and “it can have significant consequences, such as impaired access to self-knowledge, self-confidence, personal growth, ethical decision making, and compassion for patients” (p. 261). Jennings also discussed how medical schools tend to prepare students to have a sense of detachment when having to make challenging decisions for their patients. This detachment can often correlate with the student and the characteristics of this correlation include medical school students reporting that they felt they had “lost their sense of humanity” (p. 260).

Summary

The primary research question asks *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* The research has also been in pursuit of answering two secondary research questions: *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?* and, *What types of support do medical school students suggest the medical school provides to enhance their emotional wellbeing?* By examining the 2016 - 2019 survey results, a general perspective about medical school student wellbeing was revealed. The three-part interview series dove deeper into the personal narrative of four medical school students attending the same medical school. Their responses shed light on two main aspects that included their perspective that in order to support emotional wellbeing, streamlining medical school processes and creating the space for faculty to extend care and connection with students directly would exponentially change the high rate of stress and anxiety that students currently

experience. In the following section, the limitations of this study are explored as well as the recommendations for additional research.

Limitations and Recommendations of the Study

There were four significant limitations to this study. These include the inability to further analyze the 2016 - 2019 survey responses beyond knowing the number of students who answered the survey and their score total. The limitations for the three-part Seidman (2013) interviews include the number of interview participants, and the virtual setting of the interviews. A larger pool of interviewees would have enriched the data and findings.

The interviews were conducted virtually, thus the interviewees chose where they set up their virtual interview through their laptop. The researcher noted that each interviewee was in a different place during every single interview; which may have created distracting environments for the interviewees and changed how interviewees responded at different times.

A final limitation was that only one medical school was studied in a nation with hundreds of campuses that house medical school facilities. Thus, a larger study involving multiple medical schools within the state, region, or country would have yielded a greater abundance of perspectives and experiences. The following sections offer a closer look at each limitation that defines how to improve future studies.

Limited survey analysis and recommendation. The 2016 - 2019 survey provided access to a large pool of medical school student responses. The survey data helped further this study by providing an important detail that nearly half of the respondents experienced positive wellbeing while enrolled in this medical school. However, depth of the analysis was lacking. The survey data revealed that nearly half of

the respondents did not agree that they were experiencing wellbeing, so a deeper look into what that meant and which part of each survey question were students responding to negatively may be warranted. The entire story about the medical school student's experience with wellbeing remained untold.

In order to access potentially rich content, a data scientist would need to organize the results in a usable format. As described in this chapter, the Excel spreadsheet contains nine different responses from 4,747 medical school students. Simple math equates this to 42,723 data points. Without a data analyst to oversee the process and interpret the data, the sheer volume of data was too much to analyze for the purpose and timeline of this study. This researcher chose to include this as a limitation with the recommendation that further analysis of the survey responses may provide additional clarity about the student experience thereby supporting curricular and campus experience change.

Limited number of interview participants and recommendation. Although the four interviewees supplied a wealth of information and insight into the medical school student experience, additional participants would garner a deeper understanding and possibly yield varying results. When comparing the transcripts to the survey results, it was interesting that all four interviewees reported levels of dissatisfaction and, for example, as one interviewee noted he was, “disgruntled and unhappy about a lot of things.” On the other hand, the survey illustrated that nearly half of the students were satisfied with their experience which is in contrast with the four interviewees who reported they were not satisfied. If additional students were interviewed, it is possible that more positive personal stories would emerge. A comparison between the survey results

and the student interviews could be improved if there were more students interviewed. Thus, the limitation on how many students were interviewed is important to note.

When considering the limitation of students interviewed, the potential to interview additional students could be enhanced by also having access to their survey responses. It could be helpful to compare their survey responses with how they discuss their experience of wellbeing during in-person interviews. For instance, when students scored high with their survey responses, is there a correlation with how they talk about their medical school experience? For this research study and the students who were interviewed, it is possible that they might have scored low in the survey and thereby had less satisfactory comments to make about the medical school during their interviews. Additional interviewees may have revealed a correlation between a higher level of satisfaction about their medical school experience. For example, the researcher noted that it is possible that the only students willing to interview for a wellbeing research project might be those who are unhappy with the current state of their education and thereby desirous to talk about their perceptions with the hope for change. An example of this is when an interviewee revealed that she had verbalized her opinion multiple times in a variety of settings with faculty and subsequently did not see any change. During the interview, she expressed that she hoped that the interviews for this study would result in the administration paying closer attention to students' needs.

Limited interview setting and recommendation. When the researcher initially began to formulate the plan in 2019 to interview current medical school students, the idea was to meet in person. However, as the year ended and 2020 began, a different global story unfolded. After centuries of mostly in-person contact, the world turned to virtual

platforms to connect and continue the important work of careers, family, and everything in between. It was no different for this research project because the interview plan also changed from in-person to virtual. Thus, all of the interviews were conducted through the Zoom platform provided by the university where the medical school is housed.

The researcher consciously made the effort to interview from the same private space with a neutral background that did not denote any detail about the personal life in which she lived and worked. The interviewees, on the other hand, virtually met with the researcher in a different place every time they were interviewed. An example of this was at the start of one interview, an interviewee shared that he was in a study room on campus and that he may be interrupted and would need to pause answering any personal questions. Another interviewee was in the middle of discussing his experience with failure in medical school when a roommate walked through the space. The interviewee stopped speaking and turned to his roommate who had a question for him. When the interviewee returned to responding once his roommate left, he asked for a reminder on where he had left off.

Another situation occurred with a different interviewee who chose to sit outside during her second interview. While the setting appeared to relax her and her responses were more detailed offering a transparency that her first interview had not garnered, the recording was poorly transcribed because of the constant wind that was picked up by the microphone. The researcher spent many hours cleaning up the transcript while rewatching the 48 minute recording in an attempt to identify nonverbal cues that would help resolve missing words and phrases.

Therefore, it is possible that the virtual setting created barriers to communication and affected the responses of the interviewees. One recommendation would be to meet safely in person in the same space for everyone interviewed. A second recommendation would be to outline interview protocol requesting that students choose a space that they can access for every single interview. While this may prove challenging, it could result in a more consistent setting with fewer distractions or interruptions.

Limited medical school and recommendation. Throughout the literature review in the second chapter of this study, the researcher included a variety of expert sources who have studied medical school student wellbeing. These experts hail from multiple settings and professional backgrounds and have studied a number of different medical schools. The richness of their studies supported the content for this project and revealed an important limitation, mainly the analysis of only one medical school. While experiences about the students from this campus created thought provoking material, a comparison with other medical schools would strengthen a future study. It is possible that students from other medical schools might have additional insights or similar perceptions to the four interviewees when discussing wellbeing when pursuing a medical degree.

Implications. I learned a great deal through the research conducted and my experience with interviewing medical school students. I learned not only what medical school students expect and hope for as far as supportive resources for their wellbeing, I also learned that these details are applicable for everyone. There is not a single academic or professional field that would not benefit from the discoveries within this paper.

Even though the main focus for this research project focused on one medical school and in a broader sense the experience of medical school students in general by

analyzing survey results, the real world implications about stress, anxiety, and burnout are applicable to nearly every profession. In fact, most people in professional settings experience stress, anxiety, and burnout at some point during their career. For many people, it is also true that the pursuit of advanced degrees is one area where burnout is anticipated, almost expected. In order to increase earnings and benefits, many employers require additional degrees or training while also maintaining the day-to-day tasks of the current job position. Many people seeking a second or third academic degree work many hours outside of their employment schedule attending classes, studying, conducting research, and writing papers. The expectation to balance work and education is similar to what the research in this project revealed: burnout is prevalent and proposes the question “What can employers do to support wellbeing?” While the research for this dissertation focuses on medical schools and the medical school student experiences, the findings are applicable to all professional schools. In the following table, a brief overview is listed below in Table 9 to provide faculty or anyone in a place of leadership where they wish to improve the wellbeing of their community members. These members could be a departmental team, a corporate organization with human resource leadership seeking advice to improve morale, or an employer who recognizes the potential for burnout among staff (Table 9).

Table 9*How To Encourage Healing for the Human*

| Education: Faculty and Staff | Organizational Leaders: Education or Otherwise |
|--|---|
| Curricular development including topics about exercise, diet, rest, and how to handle stress before stress occurs. | Integrating topics about exercise, diet, rest, and how to handle stress before stress occurs into staff meetings. Employers willing to conduct 1:1 discussions about the wellbeing of staff and advising with support. |
| Create time for students to discuss stressors and class assignments amongst themselves. | Create time for staff to discuss the implications of ongoing projects and expectations with an emphasis on if their wellbeing is compromised (insufficient time for deadlines, lack of supportive resources). |
| 100% anonymous counseling available 24/7. | 100% anonymous counseling available 24/7. |
| Faculty and staff workshops to instill that stress is not a rite of passage expected of students to endure. | Workshops for staff to learn how stress does not create better project management, creativity or improved problem solving. |
| Create a mentoring program where students at higher levels are paired with a first year student. The higher level student is familiar with the beginning of their educational journey and will enhance the discovery of wellbeing practices for the first year student. | Create a mentoring program where staff who have demonstrated a high level of wellbeing and work-life balance are paired with staff who are challenged with burnout. |
| Faculty and teachers utilize one program to post assignments and study materials. Faculty and teachers continue to develop their knowledge about the program on an annual basis (i.e. Canvas). | Staff leadership encourages one program management tool (i.e. Basecamp) that is utilized throughout the organization to lessen the burden of learning new programs based on departmental whim. |
| Implement personal email messages instead of mass emails with automatic fillers. Be aware of significant political and historical circumstances when creating messages for students. | Implement personal email messages instead of mass emails with automatic fillers. Be aware of significant organizational changes that may be underway including a shift in leadership or changes in the financial status of employees. Be cognizant of significant political and historical circumstances on local, regional, national, and global levels. |
| Career mentoring. If medical school students or students in a school setting share that they have changed their career plans based on experiences within a field they thought they would pursue, connect them with a career counselor or faculty member who might guide them through their next steps. | Career mentoring. If staff members express a desire to grow and develop in their current field, create opportunities for new skills and experiences. If staff members express a desire to evolve in a different field, consider ways to connect them with appropriate experts. |

Summary of the Chapter

The main goal of this research was to answer the primary research question, *How do medical school students describe their general state of emotional wellbeing (or emotional state) while pursuing a medical degree?* and the secondary research questions, *What do medical school students' descriptions of emotional wellbeing reveal about the nature and presence of burnout?* and *What types of support do medical school students suggest the medical school provide to enhance their emotional wellbeing?*

Throughout this chapter, a discussion about the data results from the 2016 - 2019 survey results was highlighted. According to the limitations section of this chapter, additional analysis of the survey data would be beneficial. The three-part interview process with four current medical school students and the findings revealed from each interviewee's perspective were described. The outcome of the interviews and analysis of the transcripts revealed that three of the interviewees agreed that diet and exercise were important for wellbeing. The fourth interviewee shared that connections with his peers helped support his wellbeing.

Overall, the interviewees agreed that university processes needed to be streamlined. They also shared that faculty could support student success by adhering to the same program wherein assignments and study materials are posted for students to complete. From their perspective, by not doing so, faculty were inadvertently causing students stress and anxiety. As mentioned in Chapter One, these results could inspire faculty and administrators to consider the current programming and how they might improve the curriculum to meet the needs of students.

In order to continue decreasing stressful experiences, a general consensus among the interviewees revealed that if the curriculum included ways to handle stress, they could potentially learn how to implement stress-relieving methods before the stress occurred. While these methods could be helpful, this chapter also acknowledged the limitations of interviewing only four medical school students. With only a few students whose transcripts were studied for this project, it is recommended that additional student interviews from a variety of medical schools could provide more revelations that would help support medical school student wellbeing.

Personal Connection and Conclusion

Throughout this study, researchers Dyrbye (2006), Ishak et al. (2013), Jennings, (2009), and Nam (2019) specified that the medical school experience has historically led to burnout among students. According to these researchers there is a compelling reason to believe that when students do not learn how to handle stress during their school years, they will not know how to handle it as practicing physicians. As the researcher for this project, I discovered that students wanted to know how to handle stress before the stress occurred. The interviewees desired wellbeing and they desired knowing how to face challenges with healthy coping skills. As a staff person employed by the medical school where this research was conducted, it was a revelation that I did not expect. From the outside, it appeared that medical school students enjoyed the challenging environment but not all students prosper in a stressful learning situation.

When meeting with the four medical school students, there were additional surprising revelations including when interviewees shared that mass emails were sent to support wellbeing rather than administrators or faculty creating connections through

individual, personalized messages. The interviewees said that it might have made a difference if the emails were written to students based on prior interactions with them. In contrast, the mass emails felt impersonal and as if administrators were simply checking a box off a list of university mandated actions to pseudo-support students.

While mass emails were interpreted as unsupportive and meaningless, it was also interesting to hear how the interviewees felt after a year of attending virtual school and how it affected their sense of wellbeing. All four of the medical school students interviewed articulated that they had struggled during the 2020 - 2021 virtual school experience. They expressed hope that in-person courses would change their sense of wellbeing and their overall perception that they were disconnected from their classmates. The interviewees also described their hope that in-person classes would make a difference with how they interpreted support from faculty. The interviewees thought it might be possible that in-person conversations with faculty would make a difference with how supported the students would feel. However, by the time they were interviewed for this project, they had attended in-person classes for about a month. At the time of the interviews, they did not think it had made a difference; yet.

Even though it is too early to know if in-person experiences would change how the interviewees interpreted their academic experience in medical school, it is important to recognize that burnout in medical school has occurred for many decades before virtual classes took place. From the onset of this research, I was inspired by personal life challenges. As noted in Chapter One, I lost my brother and I struggled with the loss. I wondered how a successful, well educated sibling could present no signs of despair before choosing suicide. While studying the effects of stress and anxiety prevalent in

medical schools especially amongst students who present as successful high achievers, the correlation is clear. According to Nam (2019) suicidal ideation occurs in 11% of medical school students and depression is experienced by over a quarter of medical students. While working with medical school students for over five years, I did not know that this statistic existed before studying the current findings of Nam, Jennings (2009), Ishak (2013), and Dyrbye (2006).

Although Nam, Jennings, Ishak and Dyrbye shared studies that revealed how stress and anxiety is prevalent among medical school students, it is imperative to recognize that stress and anxiety is often silent to outsiders. Most people in society do not automatically know what struggles are taking place in another person's life. People can see success and brilliance, people can experience everything that is good in another person. However, it can be difficult to discern when someone is sinking under the pressure of what makes him or her externally successful and brilliant. I often wonder what would have happened if I had asked if my brother was okay instead of relying on the fact that he was educated, successfully teaching at a university in a foreign country, and appeared to have everything going for him. As far as medical schools are concerned, what if faculty and staff stopped for a moment and asked students if they were okay? What if medical school administrators and faculty made it obvious that there is always time for stepping back, for taking time to rest? What if the campus community lived that message and made places like medical schools places of support for mental wellbeing while achieving the highest of academic standards? I think the world and the future of medicine would greatly benefit.

As a staff person at a medical school where my work with alumni physicians brings me in direct contact with current students, there are opportunities to support their wellbeing that I had not imagined before pursuing this dissertation. For future events and alumni programming, I will invite medical degree graduates to return to campus for a variety of different opportunities. One example is the Student Engagement Committee that I co-lead with the alumnus chair. We are creating a mentoring program where I can encourage alumni to talk about wellbeing with their student mentees. Another example includes future events where alumni keynote speakers share their insights about the medical profession. They could highlight how students might benefit from learning about stress reduction long before they practice medicine.

A final example could be in the day-to-day routine when I meet with students who are looking for more information about different specialties to pursue and if we have alumni in those occupations. When the students and I talk about the varying options, I can take what I learned from this dissertation and ask each student how they are doing. I can start the conversation and point them in the right direction if they need help. I can potentially tilt the compass north because I now have a sense of what they are potentially experiencing during their journey. When knowledge meshes with compassion, campus leaders can accomplish anything including a healthy connection for our future physicians. When we provide the tools for the healer to heal, we are creating a better world for everyone, especially the physician tasked with life and death decisions.

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Appendix A

2016 - 2019 Survey Response Options and Nine Questions

Response Options:

Strongly agree, Agree, Somewhat agree, Neither agree or disagree, somewhat disagree, Somewhat disagree but I took some steps to try, Strongly disagree.

Question 1:

This week, my level of physical activity met my wellbeing needs. I was active to keep my body strong and healthy; I met my exercise goals.

Question 2:

This week my wellbeing needs were supported by my diet. I ate healthy home-cooked meals; restricted intake of highly processed foods; had a healthy relationship with my food.

Question 3:

This week I slept enough to meet my wellbeing needs. I felt well rested throughout the week.

Question 4:

This week my wellbeing needs were supported by my emotional self-care. I took measures to reduce stress; practiced mindfulness; sought help.

Question 5:

This week I was able to meaningfully connect with members of my support network. I called home; ate dinner with my partner; enjoyed coffee with a friend.

Question 6:

This week I took steps to keep myself safe and do what I could do to address worries. I avoided checking my phone when walking or driving; examined anxieties to minimize concerns; used my planner to organize my time; updated my budget.

Question 7:

This past week I was able to contribute in some way that benefited others or the greater good and enhanced my sense of meaning. I volunteered; engaged in a career development activity; engaged in a hobby.

Question 8:

This week I participated in ways that benefited myself and the community. I attended a lunch lecture or community event, shared notes on the class page.

Question 9:

This week, I made efforts to engage with my environment. I cleaned and organized my personal space; visited a park or museum; sought out an uplifting study space.

Appendix B

Virtual Interview 1: Focused Life History

3 Questions

Question 1:

How did you come to be a medical school student?

Question 2:

How did you arrive at the current university?

Question 3:

Is there anything else that you would like to share with me?

Potential follow up questions based on the responses

- What else stands out that happened within this experience?
- What did you do, think, feel or view as influential?

Virtual Interview 2: The Detail of Experience

5 Questions

Question 1:

How have you experienced success as a medical school student? Please describe.

Question 2:

How have you experienced failure as a medical school student? Please describe.

Question 3:

How have you experienced wellbeing as a medical school student? Please describe.

Question 4:

How have you experienced challenges as a medical school student?

Question 5:

Is there anything else that you would like to share with me?

Potential follow up questions based on the responses

How and when did this occur (or what else was happening at this time that might have influenced the experience)?

Does this remind you of another memory?

Give me additional background on what happened.

Virtual Interview 3: Reflection on Meaning

Question 1: based on your description about experiencing success, how would you describe the role of the medical school?

Question 2: based on your description about experiencing failure, how would you describe the role of the medical school?

Question 3: based on your description about experiencing wellbeing, how would you describe the role of the medical school?

Question 4: based on your description about experiencing challenges, how would you describe the role of the medical school?

Potential follow up question based on the responses

When you experienced [success, challenges, failure, wellbeing], what was communicated or what messages were understood from medical school faculty and classmates?