STUDENTS OF COLOR AND THE “DOCTOR DYNASTY”: THE DUAL REALITIES OF NEWLY-ENROLLED MEDICAL SCHOOL STUDENTS’ SOCIALIZATION AND PROFESSIONAL IDENTITY FORMATION

by

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As members of the Dissertation Committee, we certify that we have read the dissertation prepared by ***Cassandra Peel***, titled ***Students of Color and the "Doctor Dynasty": The Dual Realities of Newly-enrolled Medical School Students' Socialization and Professional Identity Formation*** and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

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Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

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DEDICATION

For Francesca and Margaret - two amazing women

who helped shape our pasts....

For Olivia and Isabelle - two amazing little girls

who give us hope for the future...

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ABSTRACT

The process of “becoming” a physician is influenced by a variety of factors, including personal histories, experiences with access and opportunities, roles in service, and values formed. How medical professionals are socialized has serious implications for how medicine is practiced. In understanding the professional identity formation process of newly accepted medical students, my research intends to contribute to exploring the gap of and fully understanding the process and role of professional identity formation of this particular group.

While literature exists around physician identity, there is very little focus around the identity of those who have been admitted to medical school, and who aspire to practice medicine, as well as their perceptions of how the act of volunteerism impacts their identity, along with their impressions of what qualities define a physician.

The research study sought to answer these questions:

1. What comprises the identity of a newly accepted medical student?

2. How does their educational and experiences shape their professional identity development?

3. Specifically, what are the characteristics of professional identity development?

4. How do they negotiate their professional identity and consider their role

beyond the clinical aspect?

5. How do they plan to navigate life’s most difficult conversations that come with the territory of being part of a profession that is responsible for the lives of others?

6. Are they prepared for having difficult conversations with patients and their families around poor outcomes?

7. How do they define a “well-prepared” physician, and what qualities encompass a physician? What values are important to them, and what communities to they serve? Do they have a specific emphasis or lens by which they practice medicine?

These questions illuminate a gap that I seek to better understand by conducting a series of qualitative interviews with newly accepted medical students in an attempt to further understand their developmental process as well as performing an in-depth review of classic and modern literature informing a contextual framework for ongoing analysis. My findings from the interviews reveal two groups experiencing dual realities as they become members of the same profession. These two groups can be described as a cohort of first-generation students of color. The second, are members of the doctor dynasty, whose parents and/or grandparents are physicians. I will explore this notion of first-generation students of color experiencing disruption to their identity formation process versus continuity of access and privilege within members of the doctor dynasty.

While the first group has experienced ongoing rerouting in their process of becoming physicians, members of the doctor dynasty have been given ongoing support, and unlimited resources to succeed in medicine, along with quality mentorship. I will also report on findings around the socialization process prior to medical school that shapes their values, understanding and definition of what being a physician means.

This dissertation contributes to prior literature regarding the need for reform around first-generation student of color supports in medical school, more specifically, with positive mentorship. By highlighting the inherent strengths of the group, along with the elements that contribute to the disruption of their professional identity formation, this dissertation challenges an existing medical education model that is failing students that are not part of the doctor dynasty. While literature exists around physician identity, there has been very little focus around the identity of those who have been just admitted to medical school, and who aspire to practice medicine, as well as their perceptions of practicing medicine on an emotional realm from the perspective of a first-generation medical student of color.

Implications of my study include fostering awareness around the vulnerabilities of the socialization process. In addition, high quality mentorship, and locating support systems within medicine, and for faculty and administrators to recognize when students may need additional support. Mentorship, fundamentally, is the mechanism for the transmission of both professional and personal values. Ultimately, these gaps in support and mentorship reflect the values of the academy, and the overall culture of the medical profession as one that is built to serve the elite. This study highlights this gap among two very different groups who are entering the same profession with dualities in their

socialization process into medicine.

INTRODUCTION

I. The Problem

Baby boomers are aging at the largest rate in American history. During the baby boom, which lasted from 1946-1964, “76 million births in the United States” occurred (Pollard and Scommegna, 2014). Arizona, a state known to attract retirees and snowbirds, is particularly impacted by this phenomenon. According to Arizona Indicators (2016), “Arizona's 65+ population is growing more rapidly than most other states, and is ranked #3 nationally for largest projected percentage increase in the 65+ population between 2000-2030 at a 255% growth.” This incredible projection raises the question of how well prepared Arizona’s emerging health care workforce is to service an aging population.

There is a serious shortage of primary care, geriatric, hospice and palliative care practitioners - clinical specialties that require strong emotional relationships with patients. Mar (2017) confirms this, stating, “For every 1,200 terminally ill patients, on average there’s only one specialist available. Few physicians choose to specialize in fields like palliative care and geriatrics—the pay is too low compared to other specialties like cardiology or plastic surgery.” In addition, there is opportunity to enhance the current medical curriculum by highlighting the importance of socio-emotional skills in medical school students. Medical school curriculum (Appendix C) has embedded impressions and models that students learn without periods of reflection and socio-emotional development.

Recently, their admissions criteria have changed to emphasize the hard sciences (Appendix D), with social sciences coursework not being required for admission. According to the University of Arizona Pre-Health Professions Advising Center (2018), the following courses are required for admission to medical school: one-year of

coursework in the following disciplines: Biology, Chemistry, Organic Chemistry, Physics, Math, English, Biostatistics, Anatomy/Physiology, and Biochemistry, while strongly recommending Psychology. In 2018, the University of Arizona College of Medicine - Tucson adjusted their prerequisites, and in addition to the required coursework aforementioned, they are also requiring the following one-semester coursework for students entering medical school beginning in 2021 and beyond, “Upper-Division Molecular Biology (or Nucleic Acids), Upper-Division of one of the following: Cell Biology, Histology, Microbiology, Pharmacology, Pathology, or Immunobiology” as well as a course of their choice in Social & Behavioral Sciences (e.g. Psychology, Sociology, Public Health),” University of Arizona Pre-Health Professions Advising Center (2018). With this curricular change, there is a greater emphasis on scientific mastery.

Consequently, applicants can choose to not enroll in any coursework on the foundations of human behavior, which is essential to patient care. With regard to professional standards once they are admitted to medical school, the Association of American Medical Colleges (AAMC), organizes student competencies into three categories: pre-professional, thinking and reasoning, and science. Pre-professional competencies include “service orientation, social skills, cultural competence, teamwork, oral communication, ethical responsibility to self and others, reliability and dependability, resilience and adaptability, and capacity for improvement” (AAMC, 2019).

Many of these competencies can be achieved through volunteer experiences in the healthcare industry. Among those competencies, the AAMC (2019) describes the social

skills competency, the skill that serves as the foundation of being able to speak the socio-emotional language of medicine, as one that “Demonstrates an awareness of others’ needs, goals, feelings, and the ways that social and behavioral cues affect peoples’ interactions and behaviors; adjusts behaviors appropriately in response to these cues; treats others with respect.” This foundational competency transcends having a simple conversation around a disease process - it revolves around listening to and understanding others, and building a dialogue that is customized to their context and subsequent care plan.

The required preparation for clinical exams, along with a large volume of clinical content to be learned, leaves little room for students to have time for fostering their emotional health, and social skills development. The emphasis on medical students passing the United States Medical Licensing Exam (USMLE) or “Step 1” exam after their second year of medical school is evident, as it is an 8 hour exam that “ensures mastery of not only the sciences that provide a foundation for the safe and competent practice of medicine in the present, but also the scientific principles required for maintenance of competence through lifelong learning” (USMLE, 2018).

Per the literature, medical schools, as many institutions of higher education, remain largely focused on moving students forward in their educational careers. While the ongoing “Doctor and Patient Block” (UA College of Medicine, 2018) is offered during the first eighteen months of medical school, its emphasis is on clinical communication, and learning how to “speak like a physician” with regard to taking patient histories and communicating disease pathways. After this time, medical students are seeing patients, and they are expected to know how to navigate a spectrum of

scenarios and conversations based upon the language, impressions, and modeling they learn from their mentors and peers.

The combination of a rapidly aging population, along with a shortage of healthcare providers in life cycle subspecialties, and medical training that essentially views socio-emotional development as an appendix to clinical curriculum leads me to examine the perceptions aspiring physicians have around their professional identity, as well as their level of preparedness to foster an emotional connection with their patients. The state of Arizona has a shortage of primary care providers for our aging population, a speciality that requires physicians to understand the social issues that impact seniors as well as the preferred communication style of this group, which tends to be more personalized, requiring from the physician a willingness to listen, and the ability to communicate effectively and in-person with patients. As our state continues to age over the next thirty years, our emerging physician workforce must address the profound communication barriers that often exist in an intergenerational patient/physician relationship. What impacts communication barriers is often rooted in the physician’s sense of self: their understanding of their role as a physician, how they perceive the emotional aspect of medicine, and how they choose to engage in these personal exchanges with patients. Given this curricular gap in medicine - the lack of emphasis on the physician/patient relationship, I have posed the following research questions:

1. What components seem to comprise aspiring physicians’ professional identity?

    a. What specific experiences appear to shape the aspiring physicians’ understanding of what it means to be a physician?

b. How does modern medical school curriculum contribute to the lack of socio-emotional fluency in aspiring physicians?

2. In what ways do aspiring physicians feel they are both prepared and unprepared to work with patients with regard to the emotional aspect of medicine?

a. How do their definitions of a “well-prepared” physician differ between aspiring physicians who have volunteered in a hospital setting (or other healthcare settings such as hospice) and those who have not volunteered in healthcare settings?

b. What specific experiences appear to shape definitions of what a ‘well-prepared’ physician is?” How do such experiences seem to relate to their ideas about socio-emotional preparedness? In other words, how does identity relate to preparedness?

II. Intended Impact

This exploratory case study is intended to begin a conversation about educational reform at the University of Arizona College of Medicine in Tucson, and serves as the foundation for the design and implementation of curricular and/or experiential interventions that will positively impact student preparation with regard to enhancing socio-emotional skill-building with patients. In an increasingly digital age, the soft skills developed through experiences, such as volunteering at a hospital or other healthcare entities, are increasingly vital to student development. Traditionally, soft skills have not

been emphasized in medical education, and continue to be an appendix to clinically-driven cores of medical education programs across the country.

Tangible experiences such as volunteering at a hospital or in other healthcare systems allow students to prepare emotionally and spiritually, to connect on a socio-emotional level with patients, their families, visitors, and friends, who are often emotionally drained and/or bereaved. It also allows exposure of the student to seasoned volunteers, creating an intergenerational experience and an orientation to service. Also, it is essential for students to understand that in order to treat patients comprehensively, they need to be exposed to the systemic issues that plague our community in the first place, which ultimately impact public health and trigger diseases that are rooted in poor environmental and/or social conditions.

I plan to identify the concept of pre-professional identity in conjunction with preparedness around socio-emotional aspects of medicine. The gap I am exploring is curricular and socio-emotional in nature, which play a role in the development of the aspiring physician’s professional identity as they learn how to “become a doctor” in medical school through both formal and informal channels.

If medical students were given the opportunity to work with patients and their families through a hospital volunteering program, the exposure to patients on the socio-emotional level could not only play a role in increasing participation in primary care specialties, but also could produce health care specialists who are both clinically and emotionally competent at working with this subset of patients, who present a system of

biopsychosocial and spiritual issues unique to their experience. The ongoing exposure to and relationship formation with patients allows aspiring physicians to learn what I refer to as the socio-emotional language of medicine, which consists of the mastery of affective skills such as active listening, empathy, compassion, and emotional regulation and appropriateness, as well as a mastery of the social problems that plague modern medicine: mental illness, crime, addiction, poverty, as well as an understanding of the social and cultural groups who experience marginalization regularly.

III. Goals for This Study

Maxwell (2013) identifies “personal goals” (p. 24) as the intrinsic motivations that drive a study. Given my personal experiences as a caregiver, advocate, and patient, I have extensive experience navigating the healthcare system and have a vested stake in the healthcare system as we all do as healthcare customers. In addition to my role as a graduate student at the University of Arizona’s (UA) Center for the Study of Higher Education, I am also employed full-time as a hospital administrator. Since 2017, I have served as the Senior Manager, Volunteer/Retail Resources at Banner University Medical Center - Tucson, a teaching hospital, academic medical center focused on research and medical innovation, and the only Level 1 Trauma Center in Southern Arizona. There, I am part of the hospital leadership team and direct volunteer operations for all Banner hospitals and clinic campuses in Tucson, and also find ways to connect retail programs to

clinical service lines. My personal goal for this research study is to uncover emerging themes around medical school professional identity development, with the desire to understand what aspects impacted their socio-emotional language development.

It is critical to understand that as someone conducting “backyard research,” (Hull, 2017) or, research in an environment where I hold a role in addition to that of a researcher, I am conscious of the fact that by adding this new role as a researcher to my identity, I am now simultaneously an educator, administrator and scholar in one setting. While the challenges of being a backyard researcher may mean that I have insider knowledge of institutional practices, dynamics, and a greater bias as a result, the benefits of understanding the cohort I oversee is critical to ensuring that our future physicians have developed a key developmental skill set that is not emphasized in their science courses.

Maxwell (2013) states that “What is necessary is to be aware of these goals and how they may be shaping your research, and to think about how best to achieve these and to deal with possible negative consequences of their influence” (p.27). My own identity as a health care professional and my own values as a trained medical social worker all impact the design of this exploratory case study with regard to the type of data collection techniques employed, and formulating my conceptual framework. Beyond my own bias, (which I will address later in this study), it is critical to understand how a wide range of newly accepted and first-year medical students define their identity and sense of preparedness for medical school, and how each of them is uniquely socialized into medicine, based upon their independent experiences and expectations for their higher education.

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Beyond the personal, there are practical goals within this study that include achieving a comprehensively prepared cohort of students through formalized programming. Maxwell (2013) asserts that practical goals are often focused on “accomplishing something” (p. 28). I have a desire to address the need of the primary care physician shortage by creating more interest in the subspecialties of hospice and palliative medicine (and other humanistic medical specialties) prior to the 3rd and 4th year of medical school, and I would like to advocate for curricular improvements around building the socio-emotional skill sets of aspiring doctors.

Just as medical students work extensively with cadavers to understand anatomy in all its complexity, they should have significant and ongoing interactions with patients to understand the nuanced process of an emotionally complex interaction: this may be a conversation involving a difficult and/or terminal diagnosis, and the range of emotions involved in that interaction. They also should be given the opportunity to learn how to process their own emotional trauma and how to take advantage of the resources hospitals provide to clinicians to process their socio-emotional states. For example, the Volunteer

Resources Department provides pet therapy and spiritual care services for clinical staff.

Further, the intellectual goals of this study are to understand the perspectives and experiences of students, and how they perceive their level of socio-emotional readiness to work with patients. According to Maxwell (2013), intellectual goals can also be useful for “framing research questions” (p. 29). The first thing I would need to understand is how exactly aspiring physicians define preparedness and determine what competencies are important to them. At that point, I can thoroughly explore how their service and personal experiences (volunteering, caregiving experiences, etc.) have impacted their developmental preparation for medical school.

IV. Purpose of the Study

The purpose of this study is to provide new understandings of identity formation of this cohort, and learn what their realities are as they socialize to the profession of medicine. The term I have coined, the socio-emotional language of medicine, came to fruition because I identified a need for a term that would comprehensively demonstrate the critical skill set physicians need to have in addition to their didactic training and clinical expertise. The socio-emotional language of medicine is the non-clinical language spoken by physicians that promotes human connection between patient and physician and stems from a well-developed humanistic understanding of compassion, empathy and an awareness of social justice.

There is a lack of focus in the literature on emotional preparation of the aspiring physician from both a curricular and experiential perspective. In addition, there is a likelihood that developmentally, they may identify feeling somewhat unprepared for emotionally-raw situations with patients. In this way, my study will offer new understandings into the identity formation of first-year medical students by defining, exploring and understanding their identity formation process and how they anticipate the process of becoming a physician on a developmental level.

This study aims to provide understanding with regard to how students recently accepted into medical school and first-year medical students are socialized into the culture of medicine prior to their arrival at medical school, what their realities are with regard to their pathways to medicine, and how possible volunteer experiences and other elements of socialization may play a role in their socio-emotional development. My case study will provide a framework for understanding the developmental process of a cohort of newly accepted medical students and first-year medical students.

In addition, this study will look at how the students develop emotionally, how they experience an identity shift, and what exactly those processes are. Beyond exploring these processes, I hope to adequately describe them, and capture the nuances of their personal transformations as part of my findings. I also hope to determine if there were any commonalities among students’ responses and the literature with regard to issues of medical students’ morale, support, rapport with others, curricular issues, and academic pressures. This understanding is critical in adding to the existing body of literature and recommendations for further study.

REVIEW OF THE LITERATURE

I. Curricular Gaps and Responses

As aforementioned, there are existing curricular gaps to achieving socio-emotional competencies in medicine. Curriculum plays a significant role in the socialization of aspiring physicians’ professional identity formation, and some medical schools are prioritizing to the gaps that exist. Several medical schools are adding special sessions to their curriculum. Recently, Northwestern University created a “Bedside Bootcamp” (Johnson, 2013) that would allow medical students to practice their communication skills in extremely difficult cases: giving a poor prognosis and discussing end-of-life issues. According to Johnson (2013) “the program is the most rigorous of its kind in the nation, with a requirement that interns pass graded tests in procedures and communication skills before being allowed to move ahead.” This program was developed to help solve an identified problem, which it states that most medical students do not find the complex medical procedures that revolve around the values of fixing the patient as challenging as how to communicate with them in dire circumstances.

Cornell University has created a theater-based course “Introduction to the

Geriatric Patient”, which addresses identified biases medical students may have while training in the hospital setting. According to Span (2018), “These misperceptions can influence people’s care” as the medical student must learn and understand the nuances of aging, its context in society, and how to have an honest, non-judgmental conversation with someone who is an expert in their own life and body. According to Span (2018), The Mayo Clinic, UNC-Chapel Hill, Medical University of South Carolina and the Icahn School of Medicine at Mount Sinai all have community-based intergenerational mentorship programs with seniors, where the goal in mind is to have medical students understand the nuances of life as a senior, from social barriers to sexual behavior, and everything in-between.

While medical education has seen profound advances in their curriculum, with podcasting, virtual reality, and simulated labs for clinical practice on mannequins, the advancements in how medical schools are teaching professional interpersonal skills and patient relatability are minimal. Pappano (2018) asserts that, from a clinical perspective, the technological experience of “repeated practice is important. But so is unscripted human interaction.” The American Medical Association (AMA) has created an initiative in response to the medical education gaps, the Accelerating Change in Medical Education Consortium, which formed five years ago and fosters opportunities in curricular innovation, and advancement by over 30 participating allopathic and osteopathic medical schools.

Mayo Clinic and A.T. Still University have forged ahead in cultivating curricular change. The Mayo Clinic reinforce online modules that are to be completed by medical students prior to engaging in experiential components that reinforce the onlines modules,

which include, “A multidisciplinary medical home team experience, a cultural humility workshop, emotional intelligence and personality inventories with debriefings, a day-in-the-life experience to learn how patients with socioeconomic challenges navigate the community to meet their health needs, health coaching skills practice and an introduction to population health” (American Medical Association, 2017, pp. 6-7). This developmental, community-based approach allows medical students to have the opportunity to know and understand themselves within the context of medicine. The Mayo Clinic has also partnered with Arizona State University to create a 12-unit Master’s degree called the Science of Healthcare Delivery, so that their medical students understand the systemic complexities of care from having a diagnosis, to navigating insurance, to comprehending patient barriers and access to care based on their race, class, gender, ability, religion and/or sexual orientation.

A.T. Still University-School of Osteopathic Medicine in Arizona (ATSU-SOMA) joined the consortium in 2016 (American Medical Association, 2017, p. 12) and “works in partnership with the National Association of Community Health Centers to embed medical students in 12 urban and rural community federally qualified health centers across the country during their second, third and fourth years of medical school. Students live in the community and work with providers dedicated to serving underserved patients and whole communities developing a fuller perspective of the challenges patients experience when trying to access health care services.” From requiring newly-accepted medical students to become certified EMTs and work shifts on the ambulance, to being employed by their corresponding teaching hospital as patient experience navigators, there is innovation happening around this country; however, these innovations are the

exception to the rule, and must become accepted as mainstream by traditional medical schools, so that early in their medical careers, students can learn to communicate effectively, and to understand the social barriers their patients face with regard to accessing their care.

II. The Medical and Social Models of Disability

Traditional medical school curriculum is grounded solely in the medical model of disability, which may foster an unhealthy power dynamic between patient and physician. Yuill, Crinson, and Duncan (2010) define the medical model of disability as identifying

“disability within the individual, leading to the dependence of the ‘disabled’ upon health and social care professionals for any improvements in their daily lives (p. 2.) The medical model, in which alleged “impairments” are to be corrected, cured, and/or repaired, rejects a space for disability in the health care setting, as its focus is curative, emphasizing the use of medical intervention and/or rehabilitation to create a “normal” patient. The medical model of disability reinforces the already existing social barriers between physician and patient, creating a structure that eliminates possibility, and choice from the patient. Haegele and Hodge (2016) emphasize the impact that physicians have regarding patients with disabilities, as “Medical personnel act as important gatekeepers in society and use diagnoses and labeling” and “may not take into consideration what individuals with disabilities value or want” (p. 196).

It is essential that medical students recognize the inherent privilege and power in this role - simply being a physician can be oppressive. In many cases, as the practice of medicine is deeply rooted in ableism. The medical model of disability is responsible for perpetuating biases and perceptions of disabilities that are dangerous and damaging to patients’ empowerment and self-determination. The medical model of disability in practice creates an opportunity to control patients with disabilities, rather than to partner with them around their care and find ways to engage them in creating optimal care. In addition, disability activists and scholars have written about the lack of attention given to intellectual disabilities within medical school curriculum. According to the Special Olympics (2018) “50% of U.S. medical deans reported that clinical training to treat people with intellectual disabilities is not a high priority with most citing “lack of curriculum time” as the primary reason” for its exclusion.

As aforementioned in this study, medical school curriculum across the country is primarily comprised of physiology blocks that are systems-focused, preparing medical students for pre-clerkship exams based upon diagnosing and treating disease. Wen (2014), a first-generation medical student of color, described her experience in medical school as oppressive and witnessed “first- hand the ignorance and prejudice some health care providers harbor toward patients with disabilities. On the wards there were frequent jabs about people disabled from chronic pain-why couldn't they just work like everyone else?” (p. 3). This shows that the lack of effective training medical students receive coupled with negative attitudes and biases of their mentor, results in a harmful combination when considering factors that contribute to student identity construction.

The social model of disability suggests that people with impairments are actually viewed as disabled by society’s views and actions. This model suggests that what is needed is a conceptual shift from seeing disabled individuals as problems. In medical practice “We must ensure that medical professionals talk candidly about negative impairment effects while maintaining full respect for individuals with disabilities and fighting for disability justice, for full inclusion of people with disabilities in society” (Goering, 2015). The social model asserts that disability is caused by the way society is organized, rather than a person’s impairment or difference. It looks at ways of removing barriers that restrict the life choices for disabled people. Therefore, changing societal attitudes, based on prejudice and stereotypes can help to develop more inclusive ways and acceptance of individual differences. Additionally, advocating for disability rights can also contribute to enhancing societal perceptions of chronic disease, educating others about the worth and value of the lives of people with disabilities.

Wendell (1996) explains that her lifelong chronic medical condition and pain conflicts with society’s “idealizations” of the human body” (p. 110). She points out that guilt and stigma contribute to societal perceptions of disability. There are many social factors that construct disability and “Medical care and practices, traditional and Western-scientific” directly impact patient experience and autonomy within medicine (p. 37).

III. The Rise of the “Clinical Robot”

Leslie Jamison writes in *The Empathy Exams* about the rise of the “clinical robot,” which she observed working part-time as a standardized patient at a local medical school. As a standardized patient, her role was to play a variety of patients, and assess the medical students’ ability to not only take a comprehensive medical history, but also, have the appropriate socio-emotional skill sets to address patient needs. Jamison (2018) reports, “I grow accustomed to comments that feel aggressive in their formulaic insistence” (p. 4). When she simulated a patient whose child was stillborn, the medical student said “that must be really hard to have a dying baby” (Jamison, 2018, p. 4), which

allowed for the emotional separation - that the doctor feels sorry for the patient, and that it is the patient’s misfortune to have lost a child. Jamison thought, “why not say, I couldn’t even imagine” (Jamison, 2018, p. 5) in order to ease the burden of the patient.

She also discussed what skill is needed most as a physician - the ability to empathize, as “Empathy isn’t just remembering to say that must be really hard - it’s figuring out how to bring difficulty into the light so it can be seen at all. Empathy isn’t just listening, it’s asking the questions whose answers need to be listened to. Empathy requires inquiry as much as imagination. Empathy requires knowing you know nothing. Empathy means acknowledging a horizon of context that extends perpetually beyond what you can see” (Jamison, 2018, p. 5). This skill, the author argues, is missing from medical training and it becomes evident upon a clinical simulation, that aspiring physicians are deficient in this area.

Atul Gawande, a Harvard-trained physician, writer, and expert in the field of hospice and palliative care, discusses a similar experience - about how vastly unprepared he was for the human element of medicine in his book *Being Mortal: Medicine and What Matters in the End*. Gawande (2014) explains that as a medical student at Harvard University, he was trained to diagnose and treat, “I encountered patients forced to confront the realities of decline and mortality, and it did not take long to realize how unready I was to help them” (p. 3) with regard to navigating end-of-life questions.

Gawande also alleges that physicians are conditioned to medicalize death and trauma, and often reject its natural trajectory. Given the focus on clinical mastery in medical school curriculum, and the emphasis on curative approaches to health, I seek to uncover how aspiring physicians perceive the notion of going beyond this sense of

“fixing” patients in an effort to be completely present with them, even if they cannot “fix” anything about their condition and/or diagnosis. Many times, patients cannot be “fixed”, nor do they want to be.

IV. Cultural Conditioning of the Medical Student

Prior theory and research explores in great depth the transformational development of the first-year medical student as they navigate their years in training. Howard Becker’s classic sociological text *Boys in White: Student Culture in Medical School*, focuses on the socialization of the medical student, messages they internalize, adaptations they make, and expectations for behavior as a professional. Becker (1961) observes the majority of first-year medical students qualifying a “successful physician” as having extensive “medical skill and knowledge” and “having the ability to swiftly apply their clinical mastery to the most technical and mysterious of cases” (p. 78). The majority of students are taught to focus primarily on clinical expertise, and struggle with the thought of treating patients who were not like them i.e. pediatric patients (at the time,

these University of Kansas medical students were mostly single caucasian males in their twenties), and openly dissociate from emotionally difficult scenarios with pediatric patients as a coping mechanism to practice medicine.

Ofri (2017), an internist who writes for the *New York Times* about the doctor-patient connection, offers perspective around the cultural conditioning among physicians, which is reinforced in the hierarchy to emotionally dissociate from patients. There is a gap with medical training that has been around for decades, she asserts, as aspiring physicians are conditioned to form their professional identity around their clinical expertise, rather than their socio-emotional development. Ofri identifies physician/patient communication issues as one of medicine’s greatest complexities, as “the gap between what patients say and what doctors hear - and vice versa - grows more significant” (p. 6); thus, widening the gap in communication skills coupled with an increased use of technology in medicine, further disconnecting from the patient, as physicians’ roles have evolved from significant time with patients to expedited charting and computer-based administrative work.

Ofri (2017) attributes medical school students’ lack of socio-emotional language fluency to medical school’s lack of emphasis on soft skill development. She also explains that medical school is not a training ground for compassion and human connectedness, as “Communication, empathy, and connection are not things doctors typically learn in medical school” (Ofri, p. 89). If aspiring physicians are not learning these critical skills in medical school, where are they learning them, if they are learning them at all? Furthermore, Ofri’s assertions are validated by other physicians who report their findings of a flawed physician culture that fosters an unhealthy identity formation among medical

school students.

During her TEDMED Talk, *“What Your Doctor Won’t Disclose”* Wen (2014), discusses physicians needing to embrace the "oath of healing and service" with regard to their own socio-emotional skill sets. She cites her own experiences of being bullied as a medical student. Wen (2014) describes a scenario in which she wanted to include the parents of a trauma victim in meetings about their son’s care, and the attending physician denied her request and operated from a place of fear, stating "What if they see mistakes and sue us?" Wen (2014) states that often times, physicians are socialized to “put on our white coats, put up a wall, and hide behind it." Wen shares this scenario to create understanding around how oppressive the culture of medicine can be for first-generation students of color. She views the white coat as a symbol of social barriers, dominance, and control - shielding unethical, discriminatory behavior and further perpetuating unprofessional behavioral and suppression of marginalized groups.

Wen (2014) also explains that even as she became a physician, she experienced bullying by other physicians when her own mother was dying. Her fellow physicians failed to honor her mother’s documented wishes regarding end-of-life care, and attempted to intubate her. Wen (2014) offers her perspective regarding what modern day physicians are missing during their training: the ability to continuously earn trust and hone significant communication skills, allowing themselves to be vulnerable and humble (i.e. not being “all-knowing”). Wen’s literature highlights the relationship between a physician and a patient as one of great intimacy that requires both an ability to deeply understand, actively listen with intention, and collaborate together as care partners.

However, the reality is that the modern patient and physician relationship is often

rooted in power dynamics and social politics. Bergsma (1997) asserts that doctor-patient encounters can be viewed as micro-political situations in which the control of information reinforces power relations that parallel those in the broader society, including social class, gender, age, race, and political economic power (p. 18). This demonstrates that the socio-emotional language of medicine is critical to aspiring identity formation - it allows the physician trainees to unpack patients’ personal and social dynamics to enhance overall public health.

Wen (2014) also describes how first-year medical school students learn how to think and communicate as physicians in her book *When Doctors Don’t Listen: How to Avoid Misdiagnoses and Unnecessary Tests.* All too often, Wen (2014) finds the formulaic, depersonalized practice of what she calls “cookbook medicine” as physicians are “no longer empowered to listen” - for each chief complaint, they are taught an algorithm to follow (p. 4).” She identifies a “failure in the way doctors are being trained to think” and subsequently relate (p. 7). What is missing is physicians being trained to partner with the patient surrounding their care. She advocates for “returning to the fundamental partnership between physician and patient” (p. 9) as she states that medicine is increasingly depersonalized, a critique of our larger system of medicine.

Dr. Wen discussed her time at one of the nation’s top medical schools, Washington University School of Medicine: “Out of the dozens of courses in first and second year, we had just one class that addressed the human aspect of medicine. It was called Practice of Medicine (p. 41) and “the problem is our medical education is often disproportionately focused on science and technology, and the desire to be an excellent

clinician isn’t nurtured or fostered” (p. 42). As a result, aspiring physicians are unprepared for the nuances of their patients’ personal narratives, as they neglect the social roots of disease that accompany the genetic causes.

Dr. Wen also uncovered a lost art in medicine: the ability to patiently sit and be still, to absorb the essence of the presenting patient. While the current model of practicing medicine contributes to this lost art, there is much more to the art of medicine than being a competent diagnostician. There is a spiritual element of medicine, an intimacy, the responsibility of shepherding life and death - the role of physician as a modern day medical and social detective, coach, educator, and facilitator. Dr. Wen discussed not only the emotional implications of a successful physician/patient relationship - but also, the positive physiological effects on patients. She references a study in which “researchers audiotaped ER encounters and found that only 20 percent of patients were able to state their presenting symptoms without interruptions” (Dr. Wen, p. 95). Cookbook medicine is designed to maintain a hierarchical structure between doctor and patient, rather than foster a successful partnership. Dr. Wen (2014) states that “more time and better communication leads to a more accurate diagnosis and better care” (p. 58) that is tailored specifically for each patient and their particular needs.

In addition, Dr. Wen has struggled profoundly with the culture of bullying in medicine, and its impact on trainees. Not only are there curricular barriers to gaining fluency in the socio-emotional language of medicine; there are barriers within the existing culture of medicine. Mikkael Sekeres, M.D. discusses in a recent *New York Times* article (2018) the power dynamics during medical training where bullying and other forms of workplace violence are commonplace, ”Bullying involves an imbalance of

power between the perpetrator and the victim: in our case, between a fellow or staff physician and a resident or medical student. It occurs repeatedly over time. A victim’s inability to defend him- or herself is also part of the equation — we feared any grade less than high honors, which could compromise the type or quality of residency we might obtain, and would be determined largely by the fellow. Finally, the intention of bullying is to cause harm or distress — our fellow seemed to delight in our fear.” Among the most alarming findings of this literature review have been the uncovering of the impact of bullying by mentors and fear-based medical education and training have on aspiring physicians (and physicians).

Much of the modern bullying in medicine is a byproduct of historical practices in medical education and training. In *Mind the Gap: Generational Differences in Medical Education*, Talmon and Dallaghan (2017) discuss how previous generations of medical students endured abuse, as ”older generations were often treated harshly, and in many cases disrespectfully, by their faculty during medical training; it was common for them to be yelled at, belittled, interrupted, and badgered during presentations”(p. 61). Rather than continuing the cycle of abuse, mentors and leaders have a responsibility to end these practices, as it clearly remains a major social problem that aspiring physicians need to be aware of so they can practice medicine healthfully and in a balanced way.

A sobering element of this literature review is the discovery that medicine is the profession with the highest suicide rate, and medical school the graduate program with the highest suicide rate: “The suicide rate among male physicians is 1.41 times higher than the general male population. And among female physicians, the relative risk is even more pronounced — 2.27 times greater than the general female population”

(Accreditation Council for Graduate Medical Education, 2018). The rigors and responsibility of the profession, the extremely long hours required during training, the burden of feeling regulated by the healthcare system, and the lack of socio-emotional training to address advocacy, self-care, medical errors and poor patient outcomes are all contributing factors to this phenomenon. In response to this social problem, “Resident physicians are now "capped" at 28-hour shifts and 80-hour workweeks” (Wible, 2018), which is an unhealthy workload.

Michael Weinstein, MD (2018) in the *New England Journal of Medicine*, shared his experiences of severe depression that nearly took his life, “I am concerned for future generations of clinicians unless we change how we teach and practice medicine. We need to devote time and resources to promoting self-care. Too many physicians leave practice prematurely. Too many physicians take their own lives.” Often times, physicians feel a great deal of fear, shame, intimidation, and are not permitted to process their grief, coupled with mental and physical exhaustion. “How many others have been driven to such despondency with the mixture of sick or dying patients, whom we sometimes can’t fix, and an unforgiving work environment? It is a cruel irony that doctors and nurses are drawn to medicine to care for others, yet the majority have been bullied by their colleagues and superiors.” This issue is something that aspiring physicians must acknowledge early on, and be prepared for, the “Linguistic issues, gender discrimination, negative impact of society and lack of concern for fellow colleagues is affecting student-student interaction and student-patient interaction (Gul, Rasool, Khalid, Rasool, Khan, Ayub, & Marwat, 2012)” as knowing and understanding these issues early on in one’s career will prepare them for how to manage and address them on a professional level.

The authors assert that there is a need for medical schools to create more supportive environments, where there is experienced isolation and loneliness. What Weinstein highlights as part of the cultural conditioning of the medical student is to disregard self-care, to self-manage and contain any stressors, to not seek external help - interestingly, everything that contradicts what patients are advised to do by clinicians. According to Weinstein (2018), doctors aren’t allowed to show their humanity, which is causing a spike in mental health issues that exacerbate over time.

Pamela Wilbe, M.D., who has dedicated her life to investigating, exposing, and preventing medical student and physician suicide, understands the various pressures medical professionals have, such as dealing with margins for error, making medical mistakes and misdiagnosing in a less personal, faster-paced sector than ever before. She believes that medical students need more mental health intervention, and information as to collectively respond to abusive situations (Wilbe, 2019). Likewise, as noted by Wolf (1994), “Medical education should incorporate the principles of health promotion and disease prevention throughout medical education in order to minimize and prevent later burnout and impairment. Healthy medical students are likely to become healthy doctors who can then model and promote healthy lifestyles with their patients.” This preventative approach will not only enhance the wellbeing of medical students and future physicians, but to the patients that they serve.

V. Professional Identity Formation, Socialization and the Hidden Curriculum

Koff (1989) investigates how medical students negotiate their role and their own socialization, illuminating the evolving profession and identifying the modern constraints under which physicians currently practice. She explains that medical students are in charge of their socialization, as they must learn to accept and/or reject practices that are going to ultimately inform their professional identity (and that they should not simply be passive recipients of identity socialization, which all too often happens due to fear).

Also, Koff (1989) defines the “hidden curriculum” within medical education, which “refers to the norms and values that are communicated through the structure and activities of the educational program but are not explicitly taught (as cited in Dreeben, 1968; Stodolsky, 1983). The hidden curriculum has the ability to impact the developing value systems of medical trainees with regard to what mentor physicians determine what is a priority by assigning professional values, validating biases, and establishing the culture of being a physician. The literature has illuminated that the hidden curriculum of medicine is based on obedience, respect for the hierarchy of medicine, and tolerance for abusive behavior rooted in fear that trickles down to the doctor/patient relationship.

According to Koff (1989), there are several theoretical perspectives on the professional socialization of aspiring physicians. First, the traditional functionalist perspective defines “professional socialization as a "relatively ordered process" (as cited in Mizrahi, 1986, p. 14) “in which physician-teachers as mentors transmit values,

knowledge and skills to novices who are essentially passive recipients” (as cited in Merton et al., 1957). This is still the dominant model of professional socialization in medical school, based on the literature. The second theoretical perspective, symbolic interactionism, is framework for obtaining greater understanding around the dynamic of physician and patient interactions, and how the physician internalizes and absorbs those interactions with regard to their professional identity.

Symbolic interactionism is also a valuable framework and lens for understanding a healthy model of partnership between professional and student as, “The relationship that develops between trainees and the agents of their socialization is not unidirectional (as cited by Rosen and Bates, 1967). Trainees are not passive; rather, they simultaneously receive and shape their socialization (as cited by Becker et al., 1961; Bucher and Stelling, 1977; Mizrahi, 1986).” Aspiring physicians adopting the symbolic interactionist model would counter old, outdated, offensive paradigms of practicing medicine, which operate from a perspective of fear and stigma, which ultimately, harms physicians in training, physician culture, and ultimately, patients. Moving to reclaim responsibility for their professional identity formation would transform the hidden curriculum into something that would be a powerful contributor to medical student culture, and would transform the way physicians and patients relate and uncover illness.

Abby Norman’s *Ask Me About My Uterus*, chronicles her journey in the modern health system, while trying to discover her eventual medical diagnosis, endometriosis. She explores her experiences of being in excruciating physical pain – her symptoms diminished by physicians, not being taken seriously as a woman, labeled as an overreacting, emotional hypochondriac. While reading this book, it became evident that a

failure in our medical education system is that physicians often reject patients’ knowledge of their own bodies and disease pathways. Norman (2017) states how much fortitude patients with "rare conditions, or diseases for which there is no known cure” have, and how her questions often challenged and upset her physicians, who lacked control over a patient who engaged in the true partnership of medicine, which is far too intimidating for many physicians.

Norman (2017) states that patients with rare conditions or diseases “are pioneers not just in their own care, but in the care of anyone else with their condition" (p. 206) and feel a greater social cause - to help others who lack a voice and a community. The author discusses from a patient's perspective, what physicians all too often neglect, understanding the complex experience of the patient. Norman (2017) notes that a patient comes to a physician from a certain background: economic, social, psychological, medical, spiritual - they likely cannot speak in medical terminology. The key to a successful physician/patient relationship is a mutual understanding - the patient must communicate effectively enough to help the doctor diagnose and treat and the doctor must listen closely, ask questions that might be missed or less obvious, and they must believe in dialogue. With chronic conditions "it's the patients who tend to have their pulses on the most current research.”

Norman (2017) explained that "The patient isn't trying to subvert his or her physician", rather, “a patient's main motivation for becoming an expert in his or her condition is to manage it" (p. 45). She discusses her mother's hospitalization for anorexia and bulimia, in which "many of them lacked compassion for her, which frustrated me. I was under the impression that doctors were there to heal patients, not that patients existed

so doctors could practice medicine" (p. 79). All too often, Norman (2017) and mother felt like medical experiments for training purposes. What she wanted most out of her medical experience as both a patient and advocate, was compassion from her physicians, which she asserts, was absent.

Professional identity formation, which Wald et al. (2015) refers to as the “development of humanistic skills, behaviors, and attitudes” (p. 753) is the process of acquiring an emotional toolkit to assist with the social, or human, aspects of a profession. The key elements that contribute to a positive professional identity formation are the opportunity to consistently reflect upon clinical experiences, the ability to demonstrate resilience, and the close mentorship of faculty and other professionals who the aspiring physician can model.

This supports my tentative theory of the phenomenon I am investigating: that aspiring physicians who choose to volunteer in a hospital (or comparable healthcare setting), and expose themselves to working closely in this particular social space with patients will contribute to the development of their socio-emotional skill sets that are needed to be a competent physician, as opposed to a competent clinician who understands the operations of modern-day healthcare.

Research has shown that hospital volunteer training programs are positive experiences that allow aspiring physicians to hone “their ability to stay with suffering and death,” (Doering, Makowski, & Ramus, 2015) rather than have unresolved feelings about it (only for it to inevitably appear as a trigger later in their career). A most powerful experience recently occurred within our hospital program, when one of our volunteers died unexpectedly, and we invited our entire volunteer cohort to the memorial service.

Only one young adult volunteer attended, and all other attendees were seniors. This alone demonstrates the comfort level that young, aspiring physicians have with trauma and the grieving process.

Aspiring physicians’ professional identity construction is a result of their prior experiences, "identities, ideas about physician role and image, and visions for their futures. They face the challenge of integrating identities and reconciling preconceived ideas about the physician role with the lived reality of medicine" (Sharpless, Baldwin, Cook, Kofman, Morley-Fletcher, Slotkin, & Wald, 2015, p. 713). An aspiring physician must negotiate their identity personally, clinically, and socially, as their identity is multidimensional, and impacts their ability to understand their role in a deep, meaningful way.

Holden et al. (2015) defines aspiring physicians as being in Phase 1 of the professional identity formation process, in which “students’ curiosity and passive observations inform their nascent professional identity. Students in Phase 1, typically undergraduates, exhibit an interest in medicine but are not yet engaged with the field as professionals" (p. 762). They find the concept of being a physician appealing, but lack the concrete experience and personal references to support their decision to pursue medicine.

Holden et al. (2015) explain that one way aspiring physicians can enhance their development is by choosing to “volunteer in a community service center, thus promoting the attitude of service orientation, the habit of displaying empathy, and the responsibility of honoring commitments” as well as being able to display “effective teamwork skills” and participation in “leadership activities” (p. 763). Consequently it is developmentally

appropriate and recommended to socially engage as an aspiring physician, in which these transferable skills can ultimately aid students in preparation for a demanding career in medicine.

While Grace (1982) asserts that “there is still much that remains unknown about those at the outset of their journey into the medical profession” (p. 84), it can be inferred that community engagement in the aspiring physician phase is developmentally and socially appropriate. Beck, Chretien, & Kind (2015) validate this perspective, as medical students learn to become physicians through service learning, which develops “altruism,” “contextualizing the illness,” “developing greater appreciation of the social determinants of health,” and “reigniting the flame of service” (p.1278). Medical students who are so clinically focused prior to their USMLE Step 1 Exam, can often forget that actual people have the pathologies they are studying.

When aspiring physicians spend time with the people they will treat, they begin to understand the lifelong impact of health as well as the socio-emotional components of health from the patient’s perspective. Beck, Chretien, & Kind (2015) also report that, “After participating in the study, subjects reported a variety of benefits and insights, such as enhanced communication skills, heightened awareness of the social impact of living with a chronic illness, and increased confidence in working with children” (p. 1279), who are among the most vulnerable populations in our healthcare system.

Holden, Buck, Clark, Szauter & Trumble (2012) define professional identity formation as the foundational psychosocial process one experiences during the transformation from lay person to physician. This integrative developmental process

involves the establishment of core values, moral principles, and self-awareness (p. 245). Rather than having observation and role replication be dominant practices that contribute to identity formation, this process emphasizes the physician in training to develop a true sense of self during this critical developmental phase, and understand the distinct socio-emotional challenges that plague decision-making in healthcare. This process also facilitates the negotiation of the social persona of physicians versus the daily reality of being responsible for others’ lives.

Holden et. al (2012) also asserts that comprehensive identity formation occurs via experiential learning, as providing experiences with adequate feedback, reflection, and role modeling (p. 248) to allow for contact with patients, mentors and colleagues, supporting my assertion that volunteerism helps build these critical socio-emotional skills. Holden et al. (2012) cites “Bandura’s (1969) social learning theory” as a foundational theoretical perspective on how professional identity is learned through watching other professionals navigate their identity, and making decisions about their professional identity based upon their experiences.

According to Holden et. al (2012), this theory “describes learning through observation of others, such as the behaviors of peers and role models and may be applicable in efforts to optimize the learning that occurs during such experiences (p. 252). Learning through observation provides an important level of exposure to mentors and leaders in healthcare, where the aspiring physician can form their own perspective on issues, and learn to cultivate their own identity and foster socio-emotional development within the framework of medicine. Part of this socio-emotional development includes processes around the management of anxiety and stress by using sustainable coping

mechanisms, the balance of all that is required to succeed in the profession, and navigating healthy emotional engagement with patients, peers, and their own families.

VI. Pilot and Research Questions

According to Maxwell (2013), “one important use that pilot studies have in qualitative research is to develop an understanding of the concepts and theories held by the people you are studying” (p. 67). My pilot and exploratory work has consisted of an interview conducted in 2017 with a hospice volunteer who is an aspiring physician. During the interview, the volunteers reveal feeling “incompetent about helping others

navigate their grief process” (personal communication, February 23, 2017). This preliminary result indicates that there is a socio-emotional gap in their professional development.

By working with the hospice volunteer on multiple efforts to attend conferences on becoming a death doula, attending local death cafes in Tucson, and gaining mentorship from nurses and chaplains at the hospice, the student began to learn not only about her own individual grief process, but also started to understand the anticipatory grief of hospice employees, patients and their loved ones. Due to these results, I have formulated my interview questions (Appendix B) to ask newly accepted and first year medical students about situations and scenarios in medicine they do not feel well prepared for, as well as what they believe is missing from their preparation as they anticipate entering a distinguished profession with a well-established professional identity and culture deeply rooted in tradition.

Conceptual Framework

The conceptual framework for this study (Appendix A) is rooted in professional identity formation and professional socialization. This study contains interviews with 15 students who have either been accepted to medical school, or have just started medical school for the purposes of understanding the types of experiences they have had as a first year medical student. I seek to understand how they perceive their professional identity formation process, as well as what types of experiences they believe to be important to have in preparation for the profession. Understanding the nature of these experiences,

will provide insight into what skills students believe they developed on their journey to medical school. This study seeks to explore the students’ perceptions of their professional developmental process as well as their socio-emotional growth with regard to how they felt it changed them in a particular way and/or how their experiential history and experiences have contributed to their pre-professional identity and development.

Further, gaining insight into their level of understanding and/or exposure to disability, chronic disease, terminal diagnoses, may also be an indicator of opportunities for education. It is also crucial to understand students’ perspectives around going beyond this sense of “fixing” the patient, and learning to be present with them, as some hospital patients are inevitably not going to be cured and will be needing support with managing their long-term conditions and/or may be facing the reality of a terminal illness. This is critical in understanding medical school students’ own development, biases, cultural cues, personal experiences with death, disability and chronic disease, and how they all contribute to their sense of self, and professional identity. Learning what new medical school students have to say about the medical training and/or curricular gaps, as well as their values around what qualities comprise a “well-prepared” physician, will highlight the development of their own self-awareness and desires for their education, which is critical to their well-being as physicians in training.

My conceptual framing of this topic challenges past notions of the alleged comprehensiveness of physician training. The study will contribute new ideas to professional identity socialization, how personal experiences, volunteerism, and mentorship all interplay in professional socialization. This research study will ultimately contribute to the discipline of medical education by illuminating what aspiring physicians

feel prepared for socio-emotionally, with regard to practicing medicine, as well as the experiences that have contributed to their preparedness. Acknowledging how aspiring physicians define the composition of their professional identity and development will provide fascinating insights into the future of our medical workforce.

My experiential knowledge as a former pre-medical advisor at the University of Arizona and as a former manager of a community-based home hospice program, aspiring physicians are, above all else, seeking to gain entrance into medical school and practice medicine. The students are looking to explore an array of opportunities that will not only provide them with comprehensive experiences to prepare them for medical school, but also to find connections with mentors who will write them letters of recommendation, help them advance their resumes and market themselves favorably, and advocate for them in the admissions process.

Research Questions

Gaining admission to medical school is a rigorous process that often consists of multiple cycles. In my current role at the hospital, I am able to identify the areas in clinical settings that will allow aspiring doctors to professionally and personally grow. The experience of volunteering is helping aspiring physicians navigate the profession as well as their own socio-emotional development due to the constant nature of complex interactions with others. With regard to students who have not volunteered at a hospital, I am interested to know how they perceive their socio-emotional readiness for working with patients. It will be interesting to learn whether other types of experiences have

served as a substitute for exposing them to the emotional rigors of the profession.

The years before obtaining a medical degree are formative and instrumental in structuring a professional identity - physician identity cultivation begins long before medical school, and my research questions address their personal contexts, attitudes, and biases:

1. What components seem to comprise aspiring physicians’ professional identity?

    a. What specific experiences appear to shape the aspiring physicians’ understanding of what it means to be a physician?

    b. How does modern medical school curriculum contribute to the lack of socio-emotional fluency in aspiring physicians?

2. In what ways do aspiring physicians feel they are both prepared and unprepared to work with patients with regard to the emotional aspect of medicine?

    c. How do their definitions of a “well-prepared” physician differ between aspiring physicians who have volunteered in a hospital setting (or other healthcare settings such as hospice) and those who have not volunteered in healthcare settings?

    d. What specific experiences appear to shape definitions of what a ‘well-prepared’ physician is?” How do such experiences seem to relate to their ideas about socio-emotional preparedness? In other words, how does identity relate to preparedness?

METHODOLOGY

I. 2017 Pilot Study

I conducted a pilot interview on February 23, 2017 with an aspiring physician who volunteers at Desert Harmony Hospice of Tucson, my former employer. My approach to selecting my interviewee mirrors Maxwell’s (2013) concept of “purposeful selection,” in which “particular settings, persons, or activities are selected deliberately to provide information that is particularly relevant to your questions and goals, and that can’t be gotten as well from other choices” (p. 97). I contacted the student via e-mail and asked if they would be willing to participate specifically because they had been a long-time volunteer. This was an optimal choice, because I knew they had experience with

several patients, and there was a likelihood that they would provide insightful reflections.

I followed Seidman’s in-depth model of phenomenological interviewing, and the interview structure modeled Seidman’s three-part 90 minute format. Seidman (2013) explains that “the interviewer’s task is to put the participant’s experience in context by asking him or her to tell as much as possible about him or herself in light of the topic up until the present time” (p. 21). By asking a lot of “how” questions, the participant was able to reconstruct their childhood and subsequent journey to medicine. Using this approach, I was able to understand the detailed life history of the participant, which included their father and grandfather being physicians, while connecting it to their own perceptions of professional development as they navigated complex socio-emotional issues in the hospice setting, pertaining to grief and loss. The volunteers’ socialization to the profession has occurred not only in the formal setting of higher education, but also in the informal, generational culture of their family of physicians, or the *Doctor Dynasty*. This is a term I have coined to explain a phenomenon in which generations of physicians from a single family perpetuate the traditional standards, identities, and values of medicine.

Through this phenomenon, generations of physicians in one family provide social capital and unlimited resources and networks for the aspiring physician. It is through the doctor dynasty that aspiring physicians establish an identity that is predetermined and heavily influenced by those who trained in a different era in medicine. Coining this term has allowed me to thoroughly understand the root of traditional physician identity – with an emphasis on clinical expertise and precision, accuracy in diagnosing, and the social conditioning of being a multi-generation physician, which is based around prestige and

honor.

II. Design of Study

The pilot study informed the design of this exploratory case study, which is defined as one that is, as Creswell (2009) states, is “phenomenological,” meaning a “strategy of inquiry in which the researcher identifies the essence of human experiences about a phenomenon as described by participants. Understanding the lived experience marks phenomenology as a philosophy as well as a method” (p. 13). In order to better understand the perspective and experience of aspiring physicians, and to delve into the meaning of their identity-making, I used a methodology rooted in phenomenological interviewing, which according to Seidman (2013), investigates a process through a variety of learned experiences through the element of time.

In conceptualizing the methodology, I was ultimately interested in exploring how medical school students perceived their professional identity development and socio-emotional preparedness for medicine through a series of open-ended questions to gain an understanding of their experiences and their values. Applying Seidman’s (2013) “in-depth, phenomenologically based interviewing” (p. 14) allows for the understanding of

the aspiring physicians’ context, present-lived experiences, and perceptions around the profession of medicine.

I have chosen Seidman’s in-depth model of phenomenological interviewing, a series of three, ninety-minute interviews, for a variety of reasons. During the first interview, understanding the life history of aspiring physicians is beneficial in understanding their personal context. There may have been a life event or experience that may have informed their reason for the pursuit of medicine (i.e. being a member of the doctor dynasty), which may shape their identity formation as well as the development of their socio-emotional skill set.

The second interview provides an opportunity to understand aspiring physicians’ experiences from their own lens, including elements of their preparation that have impacted their identity and socio-emotional development. The final interview allows students to reflect upon their experiences, as well as anticipate what the practice of medicine will actually entail in terms of their identity, their role and relationship with patients, and what belonging to the profession means for them emotionally.

By employing a series of open-ended questions, I have been able to use participant’s reflections to develop the next question to further explore their experiences and perceptions. According to Corbin and Strauss (2015), these types of interviews allow the researcher to “maintain some consistency over the concepts” (p. 39), which is an obvious benefit to using this approach, particularly during the analysis phase of my study. Although I covered the topics I intended, I did not have an established timeline for each

question due to the personal/introspective nature of the questions, which provided flexibility to the rhythm of the interview.

Seidman’s (2013) approach of phenomenological interviewing, is comprised of four central themes. First, “the temporal and transitory nature of human experience,”which “focuses on the experiences of participants and the meaning they make of that experience. While focusing on human experience and its meaning, phenomenology stresses the transitory nature of human experience” (p. 16). By students recounting and reconstructing their experiences, they begin to assign meaning to those experiences as possible contributors to their identity and/or socio-emotional preparedness to work in medicine.

Seidman’s (2013) second theme, “subjective understanding”, in which researchers “come as close as possible to understanding the true “is” of our participants’ experience from their subjective point of view” (p.17), allows an understanding of the essence of who the aspiring physician is, as well as their perceptions of the role of physician as it pertains to socio-emotional issues. This process allows the aspiring physician to deeply share who they believe themselves to be in preparation for a dynamic, multi-faceted professional role and identity that often is intertwined with one’s personal identity.

The new students are not fully socialized to the medical profession. Therefore, they can fully analyze what they have experienced so far. The third theme of phenomenological interviewing is Seidman’s (2013) “lived experience as the foundation of “phenomena” - to understand what one’s experience consists of “the many constitutive elements that are part of our experience that flow together, undifferentiated while we are

in the stream of action” (p. 17). Allowing a space for aspiring doctors to reflect, and piece together the contributing factors to their identity and assess their socio-emotional development is a process - there are a multitude of factors that have led the aspiring physicians to medicine, and this process allows for them to recall and process those steps.

Seidman’s (2013) final theme, “emphasis on meaning and meaning in context” asks participants to “reconstruct their experience and reflect on its meaning,” (p. 18) requiring a deep focus and attention to the lived experience within its context. Asking aspiring physicians to acknowledge and assign meaning to the experiences have had, as well as to relate it to a greater social and cultural impact is a valuable exercise. These themes ultimately serve as a foundation to the methodology I have adopted in creating the three-stage interview process.

The three interviews provide a comprehensive approach for medical school students to reflect upon their identity formation process and their perceptions around the socio-emotional aspects of medicine. The first interview functions as a life history, to generate context and meaning in their past - to uncover any potential membership of the doctor dynasty. Understanding the students’ formative years provides insight into their development, value system, and thought process construction. The second interview serves as a mechanism for a fuller, deeper understanding of their current lived experience as an aspiring physician and their unique journey to medicine. This interview also invites aspiring physicians to discuss their experiences preparing for medicine, which is also based around their perception of their preparedness (how prepared they believe they are).

Finally, the third interview serves as a way to build meaning upon the first and second interviews, in understanding what their perceived relationship is between patient and physician, what they believe the profession will entail, and as well as what types of socio-emotional issues they believe they will encounter as they move to the next chapter of their professional orientation with expectations, beliefs, and experiences that will ultimately inform and impact their development and preparedness for medicine.

III. Sampling, Selection and Access

The initial sample had been designed exclusively for senior pre-medical students who were recently accepted to medical school. I obtained initial access to the University of Arizona Physiology Department via email, which, according to Seidman (2013), is a “formal gatekeeper” who can “control access” (p. 47). I was then invited to recruit students at an Honors Physiology Club meeting on campus, due to having been affiliated with the University of Arizona as a prior pre-medical advisor. Former colleagues remembered me, and agreed to share information about my study to the club, who invited me to speak at their meeting regarding this opportunity to participate in research.

As a former pre-medical advisor, I know that recruiting from the Physiology major, which is often a feeder major for medical school due to its courses and administrative home in the College of Medicine, would be a successful strategy, and it was, with over 20 interested students in the Spring of 2018. Being a speaker at the Physiology Club meeting allowed for the initial formation of trust, which is paramount in creating an environment of understanding, interest and ease during the interview process. Also, my current role at Banner-University Medical Center - Tucson also gave me credibility and legitimized my study for students, as the hospital is located adjacent to the College of Medicine, a place they have a great deal of familiarity with.

Due to the delay in IRB approval, I lost the majority of participants initially secured for the study, as many of my initial recruits from Spring 2018 became too busy to participate by Fall 2018, when I was finally approved. To garner more interest in a

compressed timeline, I utilized the approach of snowball sampling, in which research participants recruited other participants for the study. To honor the integrity of the study, no volunteers I currently work with at the hospital were interviewed for purposes of this study. Interestingly enough, some recruits who were aspiring physicians had just entered medical school. In this fortuitous twist, my study evolved to include 7 students who had just been accepted to medical school, and 8 students who had just started medical school.

For the purposes of this exploratory case study, and because I am interviewing two groups, I use the term aspiring physicians to define my sample - aspiring physicians are individuals who either have been accepted to medical school and are about to attend, or they have just started medical school. The term will be used interchangeably with medical school students and first year students. These are the two groups I was able to access, and they both share a commonality that they have been admitted to medical school, and will be physicians, unlike many pre-medical students who may strive for that, but may never be admitted. Ultimately, I believe that this sample may provide a fuller understanding of two different perspectives (post-medical school acceptance, and post-medical school orientation) with a very similar population.

As the number of participants increased, I employed the methodology of theoretical sampling, where “data collection is open and flexible” and “enables analysts to follow the lead of the research and direct data collection to those areas that will best serve the developing theory” (Corbin & Strauss, 2015, p. 134). Using this approach

allowed me to concentrate on thematic findings, concepts to continually understand and define, and continue to collect as much data as possible.

From data collection, came memos, coding, and analysis to the point of saturation, in which “the point in research where all major categories are fully developed, show variation, and are integrated” (Corbin & Strauss, 2015, p.135). As my codes became more sophisticated and my categories established comprehensive meaning, my research participant sample had been refined to 15 aspiring physicians. This group either attends or has been recently accepted to a medical schools in the midwest, southwest and east coast. Not only are they intending to practice medicine, but they are officially on that professional trajectory.

Utilizing an inductive approach to generate new theory, I gathered data via semi-structured interviews from 15 aspiring physicians (8 students who had just started medical school within the past month, and 7 who have been accepted and are committed to attend in the Fall of 2019). Students who are aspiring physicians, whether they have just received their acceptance to medical school or are just starting medical school typically are very high achieving.

Members of this cohort tend to have a high grade point average, are extremely motivated and driven, and are likely to engage in research opportunities, as this can serve as a resume-building experience and is a valuable part of their career preparation. Once they committed to the study, I found this cohort to be incredibly reliable and trustworthy. However, one of the most important elements of my methodology was to foster a sense of

trust, particularly for the newer recruits, the first-year medical students.

IV. Interviewing Process and Fostering Trust

Once aspiring physicians sent an email to me indicating their interest in the study, I set up a call to answer any questions they had about the study and explained the process. I asked them to let me know if they were interested in proceeding, and then we scheduled

the interviews, all of which occurred via telephone due to the lack of compatibility with our schedules. Although I anticipated that the medical students would have limited availability, I was surprised at how loaded their schedules were. I accommodated them, knowing they were taking an additional task on, something that they didn’t have to do.

By accommodating their schedules, being flexible with them, and acknowledging their heavy schedules, I allowed them to completely trust me and my research. Aspiring physicians who had just been accepted for medical school had looser schedules, but still presented accommodations needed due to time zone differences. At that point, I decided that standardizing the conditions of the interviews (via phone) was necessary to establish methodological consistency in analysis.

Interviews were conducted with 15 aspiring physicians (9 females and 6 males, ages 22-35) via phone over an eight-week period, as many participants were in-transit: moving, starting medical school, or jobs in new cities prior to medical school. According to Seidman (2013), “interviewers will not always be able to make in-person contact and will have to rely on other means, such as the telephone” (p. 51). A contact call explaining the nature of the study was made, and a review and signature of the consent form was performed. Each set of three interviews were conducted over the course of several days, to allow for continued momentum to occur.

Some interviews were conducted in an incredibly compressed format, at times, two in one day. Conducting three interviews with each participant allowed for “internal consistency” (Seidman, 2013, p.27). I selected this format of interviewing because I believe this method has allowed me to be closer to the themes beyond what observation

or administering surveys could accomplish. Observation may not have been an appropriate method for this study since the literature has shown that medical students (and even premeds) are conditioned to be social actors and tend to not reveal how they feel during training. The literature supports that many aspiring physicians are reluctant to disagree, question and/or challenge their superiors.

Having a private conversation with someone, and hearing what they have to say about their experience can be a very powerful way to establish new theory. There are nuances to a phone conversation which require attention, investment, emotional energy, and the intimacy of hearing someone’s voice is an art that should not be lost methodologically. After conducting 45 interviews with 15 aspiring physicians, what I found was that the phone was a tool that offered comfort to some study participants because it was allowed them to be as honest as possible without having to meet me face-to-face. Some participants work within feet of the hospital; being on the phone provided them with a comfortable anonymity knowing my role at the hospital.

Through the interview process, I hope to recognize their context, which may include possible traumas and other negative events, as well as obtain a sense of their professional preparation, as the basic science years are often extremely difficult. The years before obtaining a medical degree are formative and instrumental in structuring a professional identity - physician identity cultivation begins long before medical school, and my research questions address their personal contexts, attitudes, and biases towards the physician role as well as the profession of medicine.

The research study seeks to discover how medical students define their identity

and preparedness, and also understand what competencies within medicine are meaningful to them. Additionally, findings may show how aspiring doctors’ experiences have impacted their developmental preparation for medical school. My own identity as a health care professional and my own values as a trained medical social worker (where resources and support are emphasized as foundational to professional practice) all impact the design of this study with regard to the type of data collection techniques employed, and formulating my conceptual framework.

Beyond my own bias, which is rooted in the belief that medical school students seek to heal communities, it is critical to understand other perspectives and possibilities as to why aspiring doctors choose medicine (research science, biomedical enterprises, etc.), how a wide range of students define preparedness for medical school, and how each of them is uniquely socialized into medicine, and their personal context directly influences this.

In understanding these values, the interview questions (Appendix B) discuss the aspiring physicians’ personal experiences in childhood and how they may have shaped their identity, and reasons they are pursuing medicine, as well as impacted their thinking around what it means to be a physician. Understanding any foundational factors that may shape their ideas of the medical profession and/or physician behavior is important. The second interview emphasizes questions around what it means to aspiring physicians to have been accepted to medical school, as well as how they prepared to gain admission to medical school.

There may be a variety of ways in which students acquire socio-emotional

preparedness - through service, employment, caregiving, personal experiences with the healthcare system, and their education. Aspiring physicians are also asked about their experience with end of life issues (which emerged from the pilot study as an important element of preparation for the medical profession).

The first and second interviews slowly build to the culmination, the final third interview, in which participants are asked to focus on the curricular/professional gaps in their preparation for medicine. This includes the “hidden curriculum” and cultural codes that are reinforced upon entry to the profession. Questions featured in the third interview also explore their comfort level for working with a variety of patients, and unpacking their awareness of the social issues that plague medicine regularly as well as the people they will treat. The third interview also presents an opportunity for reflection with regard to socio-emotional preparation for the profession.

Hence, these questions were asked:

1. Do new medical students feel resilient with regard to working with critically ill patients?
2. What are their perceptions and expectations of the doctor patient relationship?
3. What does this dynamic mean to them?
4. Are they learning that they gain legitimacy by not establishing rapport with their patients?
5. What does it meant to be an “expert” in the field of medicine? Asking them about their hesitancies and what they feel unprepared for will also

enable an understanding of medicine that will be important to know.

6. How do they ultimately learn to be a doctor?
7. Who is their mentor?
8. How do they internalize these predetermined messages around expectations for their identity as they prepare for this profession?

V. Data Management and Analysis

After each interview, I have written a detailed memo to help direct my decisions about what I find valuable and thematic (and also provide any insights that came from it), and begin the transcription and coding process, to avoid the mistake of letting unanalyzed data “pile up” (Maxwell, 104) without being processed in a timely manner. Keeping memos has proven to be an indispensable technique to record ideas during and after interviews, reactions and themes I would like to circle back to and revisit. After 45 interviews, 1.5 each in length, transcripts, and memos, I started coding data. The two affective coding methods that I have used in my study, are: Emotion Coding and Values Coding, which, according to Saldaña (2016), “tap into the inner cognitive systems of

participants” (p. 124).

The nature of my exploratory research study is rooted in the values of aspiring physicians, who discuss their experiences, identity, and expectations of the medical profession, which culminate in their definition of professional identity and competency in a physician. Saldaña (2016) states that, “Emotion Coding is appropriate for virtually all qualitative studies, but particularly for those that explore intra-personal and inter-personal participant experiences and actions, especially in matters of social relationships, reasoning, decision-making, judgment and risk-taking” (p. 125). For example, in the pilot study, the aspiring physician exhibited a range of feelings regarding the loss of their very first patient.

While they expressed some sadness, something notable in the coding process that emerged was the sense of pleasure they gained from being matched with an extremely cheerful patient, one who didn’t remind them that death was imminent. This allowed them to depersonalize the situation, making the experience of serving in hospice less draining, allowing them to focus on the clinical symptoms of death (i.e. wet respirations, incontinence, etc.). In addition, there was a theme of self-admitted selfishness that emerged from the conversation around their experience as a hospice volunteer. They indicated that hospice benefitted their soul, and made them feel good as a person. Understanding how this aspiring physician assigned meaning to this experience provides insight into the “ethos” (Saldaña, 2016, p.125) and overall culture of aspiring physicians.

Values Coding is another data coding method I employ, as “Values Coding is the application of codes to qualitative data that reflect a participant’s values, attitudes, and

beliefs, representing his or her perspectives or worldview” (Saldaña, 2016, p. 131). As aforementioned, the foundation of this study, rooted in professional identity formation, is based upon the values aspiring physicians have around their professional identity and perceptions about socio-emotional mastery in medicine. One emerging, salient theme from the pilot study utilizing this method of coding is the doctor dynasty, the unique socialization experience of coming from a family of physicians, who have the knowledge of the skills needed to be a competent physician. This prompts me to include a question to all participants around their previous exposure to physicians and how that has impacted them.

In addition to coding strategies, I utilize analytic strategies for qualitative data analysis. According to Corbin & Strauss (2015), analytic strategies “are used to probe the data, stimulate conceptual thinking, increase sensitivity, promote the possibility of alternative interpretations of data, and generate the free flow of ideas” (p. 102). Since this study examines the perceptions of two groups of aspiring physicians, I am able to identify concepts that are similar and organize them together to continue to generate my theoretical perspective. Corbin & Strauss (2015) state that constant comparisons “determine if the two data are conceptually the same or different” (p. 94).

Aspiring doctors who have been accepted to medical school but have not yet started may not offer the same perspective on preparation for medical school or initial influencers for choosing medicine. However, there may be parallels and some overlap with both accepted and matriculated medical students regarding their perceived level of preparedness for the medical profession, and as their overall identity as an aspiring physician, medical school applicant, and emerging identity as a medical student, and then physician. Overall, these coding strategies are essential for what I am trying to uncover - how the aspiring

physicians inform their perceptions of their budding professional identity, and their socio-emotional development as future physicians.

VI. Validity/Limitations

Finally, it is important to understand what the potential threats to validity are. Maxwell (2013) offers one possibility as, “the people you interviewed are not presenting their actual views” (p. 123). How do we know that a participant is providing accurate accounts of their experiences? What if their stories are not consistent throughout the three interviews? Seidman (2013) asserts that the three-interview structure incorporates features features that enhance the accomplishment of validity as “it places participants comments in context.” Interviewing them over a period of time will allow for a constancy. I have determined an interview timeline to participants so they can keep track of their schedule.

Several types of validity threats that apply to my study include researcher bias and reactivity. It is critical as a researcher to acknowledge any potential bias I may have as a hospital administrator and as a former pre-medical advisor throughout the study in order to maintain the authenticity of the study design and its results. This bias is relevant to my own understanding of physician culture and behavior, and my exposure to pre-medical students over the years. In my experience, a great number of traditional pre-medical

students may not necessarily have the life experience to cope with the emotional elements of medicine.

One way of addressing this bias is to ask participants directly about what their experiences with disease and/or death have been, rather than making assumptions that they haven’t had a certain life experience simply because of their age. My bias that aspiring physicians enter medicine to solve social problems is challenged in this study - some aspiring physicians have made it clear to me that they are seeking to become medical technicians to cure disease and analyze pathology.

Possible strategies for managing these types of threats are recommended by Maxwell (2013): “avoid leading questions” (p. 125) and using open-ended questions during the interview process. A reliability threat also includes lack of consistency across the three phases of the interview process. Adhering to the formatted questions, while allowing for questions to be open-ended, is essential to completing the study. As I previously mentioned, Maxwell (2013) technique to “avoid leading questions” (p. 125) provides an opportunity for me to gain incredibly valuable and necessary information while trying not to garner a specific outcome. I also use a disclaimer at the inception of each interview, letting the participants know that I want to hear about their experiences only.

Additionally, anticipating what the participants may not choose to share about their identity, experiences, exposure to death, etc. is extremely important. Finally, the

limitations of the study were based on time-constraints: because the period of data collection was limited to the first six-week period of the students' medical education, the findings will revolve around initial feelings and impressions of their experiences, as well as their initial perspectives on their identity and curriculum. Further, this is one exploratory case study comprised of 15 students. It will take additional studies to begin shifting this model. Interviewing one group is a weak/small solution to a deep/large challenge.

FINDINGS: FIRST-GENERATION STUDENTS OF COLOR

I. Dual Realities

My findings, given my sample size, are rich and diverse in nature. Based upon the interviews, two groups have emerged that experience dual realities while on the pathway to the same profession. Existing in separate personal worlds while in the same professional context, these two groups (highlighted in Appendix E), can be described as the following: The first group is a cohort of first-generation students of color, mostly comprised of women. The second, are members of the doctor dynasty, whose parents and/or grandparents are physicians. I will explore this notion of first-generation students of color experiencing disruption to their identity formation process versus continuity of access and privilege within members of the doctor dynasty.

While first-generation students of color have experienced ongoing rerouting in their process of becoming physicians, members of the doctor dynasty experience ongoing support, and clear routes to access resources to succeed. This chapter will discuss findings around first-generation students of color, their individual contexts and stories, and how they experience the socialization and professionalization process of being accepted to medical school. I will also report on findings around the socialization process prior to medical school that shapes their understanding and definition of what it means to them to be a doctor.

II. How First-Generation Students of Color Experience the Socialization and Professionalization Process

Within the cohort of first-generation students of color, are a variety of histories, perspectives, contexts and voices that inform their journeys to medicine and their process of identity formation. Seidman’s three part interviews allow grounded concepts of their identity and preparedness to emerge. Within this study, first-generation students of color comprise an overrepresented sample of this group. According to the University of Arizona (2015), while under-represented groups comprise 35% of medical school students at the University of Arizona College of Medicine, they comprise nearly half of my sample. This provides valuable findings into understanding their process of “becoming” initiated into the culture of medical education, and their life stories are a sharp contrast to recently admitted students of the doctor dynasty.

First-generation students of color represent a resilient, diverse, talented and experienced cohort who offers a dimension of perspectives that have helped cultivate their personal and professional identity, as well as their motivations to pursue medicine**.** Data from their life histories featured in interview one reveal a range in experiences that fundamentally distinguish them from members of the doctor dynasty and shed light on the lack of a safety net to pursue medicine. Early stories of newly accepted medical students, and/or students who have just started medical school create an image of students who have a commitment to building community health and empowerment through

medicine, and have experienced systemic barriers to accessing quality healthcare throughout their lives.

In addition to experiencing barriers to accessing healthcare, themes of this cohort’s life histories include experiences with caregiving, the importance of community, and understanding cultural perceptions of medicine. Data from subsequent interviews around pursuing medicine reveal the following emerging concepts: being institutionally re-routed, feeling isolated, negotiating the hierarchy of medicine, navigating identity, and experienced tension with mentors. Medical school students identify these grounded concepts as being integral to the composition of their professional identity.

III. Themes from Life Histories

Issues of Accessing Healthcare

Some students have spent the majority of their early lives struggling to access quality healthcare, and lived in neighborhoods that lacked healthy food options. One medical student states, “I didn’t have a pediatrician, went to free clinics on occasion with a different provider every time, and ate fast food throughout most of my childhood. My younger siblings and I shared a tiny room for years and we witnessed gun violence in our neighborhood.” This particular student, from an early age, took care of their siblings, and shielded them from neighborhood gang wars. Their process around becoming a physician is based upon survival and strength, as well as a rich knowledge of childhood stressors and trauma that negatively impact health.

Another student states, “Growing up in major poverty, my whole outlook is different than other med students. I have to become a physician. I have no other option. My peers can live with their parents until they feel ready to leave. I always had to be on my own, and come up with a plan. My parents didn’t go to college, grad school or med school. They work multiple jobs. My parents did not go to high school! This is it for me.” This particular feeling highlights the stress and pressure to succeed in a first-generation family without an alternative plan.

These narratives highlight the major responsibilities first-generation students in this cohort have had on their journeys to medicine. This group understands being part of communities that are continuously oppressed and marginalized, how they have lacked a safety net, access and resources to succeed, and face immense stress and pressure to

function as their own guides, and completely self-manage their educational and professional experiences.

Experiences with Caregiving

A sizable number of the medical students in this study were brought up on both sides of the Arizona/Mexico border, experiencing the trauma of family separation, not being able to see parents, siblings, and other family members. One medical student states, “For so long, I thought my father hated me; but now I understand that he wanted to care for his own father when he was ill.” This highlights an example of how medical students possess a significant lived experience around border issues, and the complexities of cross-cultural caregiving.

Several students had mothers who were ill, bankrupting their families, changing their entire lives, “My mother went from an active, vibrant woman to someone who couldn’t work anymore. She was always in pain, sleeping, and we had to sell our house, and move in with my aunt. My parents would fight. My mother was too tired to help us with anything. In many ways, I became her mother.” This particular student shared their narrative of experiencing a parent decline at an early age, and the stressors that accompany illness from the perspective of a young caregiver. The loss of an energetic parent, and the uncertainty that an illness brings to the family unit is something that this student has lived through and understands fundamentally.

Several medical students report having the experience of caregiving for elderly family members as well. “My grandmother had MS and I would see how exhausted she

would be, as well as my grandfather, who was her caregiver, on a daily basis. He was a diabetic and was always saying how drained he was.” Understanding the perspective of an elder living with a chronic illness, and simultaneously caregiving provides the medical student with a rich knowledge base of social problems that are tied to medicine - one of them being issues around elder supports; more specifically what supports need to be in place and/or considered when a senior couple cares for one another.

Another participant reports, “Caring for my grandmother with Alzheimer’s - there is so much stigma in the family. We can’t mention the disease. My grandmother doesn’t speak English and does not like going to the doctor because they don’t speak Spanish there. Sometimes she is with us, and sometimes she is not. That is the nature of Alzheimer’s. I think we have gone through the grieving process over a period of time. We are slowly losing her.” This particular student discusses the stigma associated with receiving a diagnosis, as well as the bereavement process through the lens of a grandchild. More particularly, how degenerative diseases such as Alzheimer’s that are progressive and can have high levels of unpredictability, can impact a family’s ability to function for decades, and have cultural implications that impact patient care.

The Importance of Community

First-generation students report taking on great caregiving responsibility at an early age, experiencing economic instability, helping their fellow community members and serving others in their neighborhood. One medical student states, “My family comes from Vietnam, and we are centered around our community. Our community is large, and

extends beyond immediate family. Aunts, uncles, cousins, and friends are all part of our network. Helping one’s own community is very important. That is my hope - to pursue medicine from this angle.” This student gives voice to the phenomenon of having the experience of living and sharing intergenerational households, having a variety of family members take part in the healing and caregiving process, and fostering a sense of trust in immigrant communities where quality healthcare services are lacking.

The importance of lifting up communities through expanding access to quality healthcare, creating caring networks comprised of resources and education, and focusing on public health issues with the goal of community stabilization, is what drives first-generation students of color to pursue medicine. The practice of helping others fosters compassion in medical students, which is a quality this cohort undoubtedly has.

Cultural Perceptions of Medicine

Some first-generation students of color discuss their cultural upbringing around medicine, and how their family members share a general distrust for traditional medical providers: “From an early age, I was shielded from healthcare. My mother doesn’t trust doctors, or western medicine. Caring for my grandparents taught me everything I needed to know about medicine. They don’t speak English, they have little education, and they

are labeled as knowing less, even though they are some of the smartest, most talented people I know.” This student understands the systemic oppressions immigrants face due to linguistic and/or cultural barriers, as well as existing perceptions and attitudes that may impact access of health care by first-generation families. This student also acknowledges that health is largely cultural, and disease is approached in a variety of ways based upon a given culture.

While several students speak about their role as a caregiver, one first-generation student of color reports their process of self-care, and living with a chronic disease. “My family kept telling me I was too sick to be a doctor. I was not encouraged to pursue medicine because of the fact that I am a female with a rare medical condition.” Her chronic illness makes medical school a challenge, and can emotionally be exhausting, “I can’t relate to your average medical student. It’s not fair. It’s hard to expect to be limited, and to surrender at all during this process. I need to take medication, go to my medical appointments, but that requires you to go to the doctor more often and, my treatment regimen is at home. Sometimes I have to go through a period where I have to inject myself with medication - but I am resilient.” At times, she reports that her condition makes her feel more isolated. As a patient, she understands the vulnerability involved with being under someone’s care.

This medical student also has expressed gratitude for what her chronic disease has taught her: “It allows me to be more sympathetic and understanding. I’ve also learned to be more patient. Being diagnosed with something tests your limits. I had no choice but to be resilient. If I don't help myself, I can't help others the way I want to. My focus is on helping impoverished communities with chronic illnesses - to enhance their access to

costly medications and overall well-being.” This student’s goal is to raise awareness and to provide exposure to the plights of chronically ill underserved communities, something she is prepared to do.

Also, while she is eager to work with this population, she is keenly aware that her medical school peers may not be as ready: “Medical students are forced to interact with a segment of the population that they cannot relate to, generally speaking.” She expresses how community is at the center of her life’s mission and work, “Knowing the challenges of what people go through, whether it be the homeless population or children with special needs, or you know people with chronic conditions like myself. I think all those situations kind of really make me more socially aware as a person. I see myself as a teacher, and I want to use my role as a patient to educate others on prevention and lifestyle management.” Her desire to use her role as a physician to educate and raise awareness around healthier, more accepting communities is a critical finding.

One medical student discusses living with her visual disability and how others construct a perception of her and make judgments around her abilities before even knowing who she is, “Often times, people with disabilities aren't focusing on their disability. Other people might be doing that that. People with disabilities are focused on their personhood, and I think that is what makes me qualified to work with patients. It is the public that tries to make people with disabilities invisible.” This student runs a successful animal companion program, speaks internationally, and lives a full life of service to others beyond studying medicine: “Having a disability taught me not to assume things about people. People have done that to me, and I don’t like to be categorized

and/or limited.” This student addresses and defines disability as a socio-cultural construct, in which the way we understand and acknowledge disability is fixed in our society’s perceptions around ability. She also discusses her disability in the context of being a healthy, active woman in the prime of her life.

Further, the social model of disability affirms her experience by highlighting that people with disabilities are disabled by societal barriers, not by their differences. This student has a high quality of life, is extremely successful and accomplished and lives a life of purpose. The social model of disability also informs the attitudinal barriers caused by various perceptions of difference, which range a spectrum from physical to emotional. It also contradicts the medical model of practice which focuses on “what is wrong” with the person with a disability. The medical model fosters a “blaming the patient” culture by leading patients to lose choice and control over their lives by focusing on the difference and/or impairment, rather than their need to lead a healthy, productive life. The medical model perpetuates views of the patient with a disability as a problem, rather than a problematic healthcare system which continuously seeks to “fix” and/or “cure” the patient.

IV. Themes from the Socialization Process

Being Institutionally Rerouted

While the first set of interviews created an impression of how first-generation students experienced life early on to inform their identity and context, the second and third interviews provided information on how this group experiences the socialization and professionalization process of being accepted to medical school. First-generation medical students of color are an intrinsically self-motivated group. Their self-professed sense of “not being a quitter” is one of the hallmarks of their identity. They are able to

withstand and recover quickly from difficult conditions. Challenges throughout their process of pursuing medical school have fueled their desire to succeed in the profession.

Medical students report that being a first-generation medical student means that “Everyone in your family is excited and proud of you - but they have no idea what it takes or what it means to get there.” This notion of not being surrounded by those who are knowledgeable about the process is an inherent disadvantage to the process of becoming a physician. In addition, their motivations for practicing medicine closely align with their sense of wanting to help their communities of origin. “I went into medicine to genuinely help others, particularly help others have access. To me, well-prepared doctors have worked with diverse, underserved communities.” Several students noted that being accepted to medical school has been a dream for so long, and to finally arrive is, at times, “difficult to believe” due to the continuity of obstacles, whether they be social, economic, racial, or gendered.

A common challenge faced by prospective medical students has been re-applying to medical school three, four and/or five times, which each application cycle taking one full year to complete. These setbacks serve as a motivating force to excel in their studies. Some have experienced barriers of a systemic nature due to their racial identity, as aspiring physicians who identify as students of color have often been mistaken for nursing and/or medical technician students.

One student of color also report having been discouraged to pursue medicine from academic advisors at their respective undergraduate universities: “I got shut down... I mean there was nothing during our conversation that was positive and supportive. Every

minute we had they were trying to convince me to pursue a different career goal.” This practice of professional rerouting of students, in which students are deemed inappropriate for a profession based upon their identity, and are primed for careers that have been pre-determined for them by institutional gatekeepers, is a discriminatory practice.

This practice of rerouting also contributes to the obstacles and disruptions first-generation students of color face as they pursue medicine. Another study participant states, “I've done pretty good for myself so far. No one in my family has gone to college or medical school.” The student also expressed disappointment with her advisor for not offering more support and resources. Rather, she noted that “I experienced support to enter alternate fields, such as public health, and the conversation was very heavy on “if you don’t get in...” The student made the connection that “If they're treating me this way, they are doing it to other students of color, too.”

First-generation students of color report having to negotiate the feeling of excitement, gratitude and privilege upon admission to medical school, with a feeling of motivation to “prove everyone wrong,” coupled with the fear that what is lying ahead are even more barriers and systemic abuse. One student states, “I think as I grew older I realize that there’s a sense of pressure that, you're looked at a little bit differently. They're kind of wondering how you got there and where you're going and really question your ability to reach all these goals.”

The impact of professional rerouting has the power to create self-doubt and a potential loss of self-pride among students. However, the resilience exhibited among the group is a positive attribute to endure the rigors of medical school; however, the concept

of relentlessly enduring also leaves first-generation students of color vulnerable to abuse and mistreatment. This may have implications on overall emotional and psychological well-being, as racial identity is core to the essence of one’s self identity and self-concept. They have committed to pursuing medicine at any cost, and they anticipate having moments in their medical career that will test their values and attitudes.

Identifying Preparatory/Curricular Gaps

Not only are first-generation medical students of color overwhelmed by the amount of clinical material they are expected to master, they also believe it is misleading when university admissions and/or advising centers promote that they should consider majoring in a non-science discipline. Students who majored in a non-science discipline now feel behind academically, and regret not taking additional neurology and cardiology classes. One student states, “It didn’t matter in the end, to pick “what I love.” Now I am playing catch-up when others already know this content, and they are simply reviewing it. I am at a disadvantage again.” These findings support the literature around universities reinforcing and requiring more hard sciences prior to admission.

A possible consequence of the emphasis on hard science, is that students may lose their focus to apply clinical material to actual patients. One medical student shares, “It’s easy to get sucked into the basic biology of what's happening and then lose sight of the

bigger picture - that these processes actually happen in human bodies.” Once they are admitted to medical school, students admit that thinking about relating the concepts to patients is far from their mind, contradicting their values, and purpose for pursuing medicine. Due to the overwhelming quantity of information that they are expected to master in a short time in preparation for their USMLE 1 Exam, there isn’t any time for it, as one student states: “Right now, I'm not even fully paying attention to what the patients are saying and I'm asking them their medical history.” Medical students admit that they are distracted by the content they are required to know, and therefore are currently neglecting to connect it to actual patients at this time.

Although Psychology and Sociology are disciplines featured on the MCAT exam, one medical student reports that “taking Psych 101 and Soc 101 does not build emotional intelligence, experience does.” In fact, only one medical school was mentioned in the entire course of the 45 interviews for having a comprehensive, four-year approach that embeds the mastery of interpersonal connections within their curriculum - from awareness of tone, honoring personal space, and respecting personal boundaries of patients. The medical student who attends this school describes their medical school as “having a class two hours a week to learn about how to establish rapport with patients. It’s why I came to this school - it was the only school where anybody mentioned a humanities aspect of their curriculum throughout the four years - they even teach about body language, and nonverbal cues, and how that impacts patients.”

This type of embedded curriculum is not universally mainstream, and first-generation students of color in medical school express concerns around being trained as anatomical technicians, without having the opportunity to demonstrate their life

knowledge and experience with medicine’s greater social context and psychological nuances of medicine. According to one participant, “Developing an emotional IQ is lacking from training. From what I observe, most doctors are distant from their patients and don't try to understand them.” Whether this is a protective mechanism or a byproduct of the corporatization of medicine, this observation and internalization of current medical culture is impactful to the identity of medical students, as they seek to question current practices of establishing an appropriate rapport with patients.

Feeling Isolated

First-generations students of color acknowledge how emotionally and mentally taxing the process of “becoming” a physician is. From facing social, economic, political and racial barriers to being rerouted during the application process, a constant stream of setbacks can create significant emotional strain. First-generation students of color in medical school report that one of the dominant themes that informs their identity development is the perpetual “feeling of being misunderstood by others, particularly by those who are not in the medical profession.” They communicate feeling frustrated that family members and other important people in their lives expect more emotional and physical presence from them when they are already drained, exhausted and depleted of any energy they might have.

First-generation students of color make immense personal sacrifices in order to gain admission to medical school, and to receive their degrees. One participant stated, “People outside medicine just don’t understand what it really takes to be a doctor.” From their journey as a pre-med applying to medical school, to gaining the certainty of

acceptance into a medical education program, the feeling that no family or friends understand the personal sacrifices that medical school has on their human spirit is a prevalent feeling among the group.

Another study participant stated, “I don't think I've ever faced something as challenging and as burdensome as being part of the medical education system.” Due to the lengthy medical training process, which on average takes 10-15 years, medical students consider how this long-term sacrifice will impact their lives beyond medicine. One first-year student stated that they anticipate sacrificing joy and pleasure long-term as, “Being a doctor is about giving up things that you formerly love.” Some have questioned if this is what they really want, as aspiring physicians negotiate the feelings of pride and accomplishment by gaining acceptance to medical school coupled with the feeling of realization that it may come at the price of their social life and relationships. One participant states, “Sometimes, I am overwhelmed and I am unsure that this is the appropriate pathway for me.”

What further fuels this feeling, and a factor that contributes to feelings of isolation among first-generation students of color is the reported overwhelming academic workload. First year medical school students who have just started their respective programs report being inundated constantly with information, have conceptually difficult classes, study long hours in the library, lack any free and/or personal rejuvenation time, and endure “mental sacrifice.” This has fostered a sense of loneliness among the cohort.

This theme of feeling alone not only contributes to the lack of relatability medical

school students have to their doctor dynasty peers, but also presents a risk factor for mental health issues. As one medical student reports, “You often feel like you're alone in those situations where you can't relate to anybody. It's hard to tell sometimes what content is really useful. I've taken in all these things and so much information I don't really feel like I mastered that much of it.” This student reports becoming unsure of himself. This feeling of academic overload among the cohort can foster a loss in confidence in their abilities.

Although their talent and ability played large roles in their admission to medical school, “Every accomplishment seems like a set-back because I have to start the process of struggling all over again.” Although aspiring doctors can anticipate that they will face a great deal of personal sacrifice to enter this profession, there is concern for their diminishing flexibility. One aspiring physician reports that, “every day of medical school you feel like you are majorly behind.” They also expressed concern around the length of time it takes established physicians to complete charting and computer work, along with conducting a full, thorough and accurate medical exam, diagnosis and treatment plan. They anticipate that once they are established physicians, they will still constantly feel that they are “out of time,” racing against the clock to provide a high level of care to patients. They are witness to systems of pressure to simultaneously generate revenue, maintain meticulous charts, have a connection with patients, and be a skilled clinician simultaneously.

One female student of color discusses in detail her struggle with being multiracial in medicine, “Where do I fit within the context of medicine? I don’t see many people who look like me, and that weighs on me. I’m from an urban area - this is a very different

setting.” She discusses not feeling a sense of belonging in the medical community, and that she lacks a secure, defined place in medicine. Prior to arriving to medical school, she attempted suicide after an emotionally abusive relationship in college. “I was a victim of sexual assault in my previous relationship. That was traumatic for both me and my mother. When I was hospitalized after the incident, I was not taken seriously when I discussed my pain level. I wish that my doctor had additional training on patient and family supports. Not only how to talk to patients at the hospital. When the patient is traumatized, they may not be hearing you, and the family might have questions. Physicians need to know how to talk to all parties involved.” This medical student revealing her deeply personal experiences as a patient highlights the emotional insights around voicelessness that first-generation students of color possess in medical school.

Furthermore, students of color report feeling silenced when participating in collaborative work. One female medical student of color reports, “When I say things passionately people think that I’m angry. During some of our meetings sometimes people say, “You seem really too intense about that” and I didn't feel that what I said was intense.” These experiences can contribute to aspiring students’ struggle with voicelessness within the dominant culture of medicine.

This medical student shares that if there were less cultural rigidity in the profession, then there would be more openness around how emotions are permitted to be shown, and how it’s perceived. She adds, “If they are calling me intense, then how are they viewing stressed out community members who are worried about their health? Are they not taking them seriously?” This is an example of a student recognizing the medical school system conferring dominance on her as a woman of color. She asks, “Am I

wondering if I am going to have to become more like the people who are running this place...” This conversation highlights the student’s struggle with a disrupted identity formation process. Rather than finding a way to adopt aspects of physician identity along with her own personhood, she feels that she will need to “bend” and “become” like the majority of her classmates, who she cannot relate to.

Students report that events such as the Second Look and the White Coat Ceremony create added anxiety and disruptions for them around identity formation. The Second Look is an event designed by the institution to promote accepted students’ visitation of the campus to solidify their commitment to the institution. For this cohort, this event can inform and/or provide a sense of place and belonging. It may also foster opportunities to locate mentors and/or guides.

Unfortunately, students shared some negative experiences during the interview process. According to one medical student, these events can further generate feelings of isolation within the medical community, “During Second Look, I was uncomfortable. People are really competitive, and you’re comparing yourself to others who are already published, and some medical students even knew staff members at the event. That was stressful, as I didn’t know a soul.” Comparing oneself to others robs the medical students of their own ability to have a strong sense of self, and celebrate what their contributions to the class are.

For another newly admitted student, Second Look provided them with doubts about their pursued pathway, “After listening to everyone’s background, I wasn’t really sure that I was a fit for medicine. These are all very, very impressive individuals with means that I was going to become colleagues with. In some ways, the event became a

popularity and status contest. Someone asked me what my MCAT score was...I was caught off-guard. I thought we were done with that...I have a lot of demons about how ruthless and cut-throat medicine can be.” Being forced into a competitive conversation, being labeled as a test score, and feeling a lack of agency over their own private information is disruptive to the identity formation process. The student feels that they had to comprise in that moment of being asked; they felt pressure to share, and that is an extremely uncomfortable feeling.

Another medical student expressed concerns around the informal side conversations medical students had during the event, “They were debating about various issues: reproductive rights of low-income women, our local homeless population, and there is a lot of judgment around that. There was a lot of victim blaming and shaming going on, and it really bothered me. There is still a lot of stigma around people without insurance as well.” This experience confirmed for the student that a sizable portion of their peers were not going to share their values for entering the profession. Others felt alienated at these events, “People were just trying to position themselves with College of Medicine leaders - it was off-putting and offensive. I can’t relate at all.”

Others discussed the lack of relatability to students who were “talking about taking the summer off to travel, and maybe do some volunteer trip. I have to work two jobs. I don’t have the luxury of volunteering, or traveling to volunteer.” This experience highlighted the difference in status among their peers, as well as an acknowledgment of how divergent their pathways to medicine were, and how this system for elites was not designed for them in mind.

The White Coat Ceremony is a ceremonial, formal initiation to medicine, for medical students, as they progress in their training. Some students expressed mixed emotions around the event, “Although there's a lot of positive reinforcement, I know it is strange to say this, because people congratulate you and say this is a good thing, yet I haven’t done anything. It’s actually overwhelming.” Another student was mistaken for a medical technician on her way to the ceremony, “Someone asked me if I was a PCT (patient care technician), and I stated I was a medical student. I actually had to repeat myself. For me, the ceremony was emotional. All the obstacles I faced trying to do this flashed before my eyes, and suddenly I was here. It meant so much to me. Yet, I haven’t accomplished anything in the medical field yet, so it means so little at the same time.”

The ceremony for others, symbolized the transition point of becoming, and revealed emotions around who they were, and anxieties around who they were going to be, “Right now, nobody understands me or the values I hold. I don’t think anyone in my class has had my experiences. My past is important to me. As I look to the future, with the White Coat ceremony, I want to be able to decide how I become a doctor, and who I will be. I don’t want to compromise myself in the name of medicine, otherwise I will be a hypocrite.” While Second Look reinforces a commitment to the institution, the White Coat ceremony reinforces the commitment to the profession - to recite the Hippocratic Oath in which newly accepted medical students pledge, in unison, to do no harm to patients.

Negotiating the Hierarchy of Medicine

Although first-generation students of color have gained entry to the exclusive club of medicine, they lack status within the organizational hierarchy. Once admitted to

medical school, they shed their college-senior status and descend to the lowest ranking in medical training hierarchy: the first-year medical student. Their observations through volunteering have made them aware of the established power dynamics in medicine, and they struggle with this hierarchy. One theme that emerged from the data revolved around respecting those in authority in order to ascend in status. According to one participant, “I don't really like that part of what the role of medical student is….I don't want to say that there’s intimidation, but there's this automatic...everything you say is right and/or I have to listen to even if I don't agree - I need to go along with that because of your position of power and I don't really feel comfortable with that.”

The practice of submission to authority and/or being professionally punished for challenging an established physician is something aspiring physicians struggle with. They believe that their thoughts and values begin to become compromised as they become introduced to and eventually be conditioned to, adopt this particular part of the culture - that their minds are no longer their own. Their perspective is that they now belong to a deeply rooted historical tradition of medicine, in which there is an established culture of deep reverence and respect for established physicians, who are held in high esteem and are often deemed infallible by colleagues.

One student states that fear of the “hierarchy gets in the way of medical students trusting their instincts - after all, physicians are controlled by the system in which they are employed.” Aspiring physicians are concerned that this culture and approach to the practice of medicine impedes quality clinical care. This notion of feeling that they are

owned by the medical school they have been recently accepted to, and their acknowledgement of future silencing and adherence to “the system” creates a dynamic that fosters identity confusion, as well as a legitimate fear of losing part of their own identities to medicine.

However, first-generation medical students of color are keenly aware of the negotiation that is involved with this dynamic: that, in order to thrive in medical school, there must be, an acceptance of the hierarchy and its confines. An additional consequence of feeling owned by the institution, is, medical students losing control of defining their identity, as “Now, other people are informing my identity, and medical school leaders are reinforcing my status as a new medical student. Building an identity is a process that takes time, and you need some unscheduled time with yourself to evaluate yourself, and get to know yourself. There isn’t time for that, and identity building is not emphasized.” First year generation students of color understand the critical need for identity building independent of the university. There is a recognized tension, and struggle here, as well as a reinforcement that their spiritual lives are in jeopardy the more deeply they are embedded into the culture of medicine.

When future doctors are accepted to medical school, a shift in mindset occurs. Suddenly, they are confirmed doctors in waiting, and there is a great sense of duty and learned professionalism that comes with being initiated into the profession, as one aspiring physician states, “Becoming a doctor is life altering. You are no longer a normal everyday citizen.” With that, come a set of learned values and rules to professionalism

that shape their perceptions of how their identity is forming. Part of the professional development of a future doctor is not only to accept the hierarchical structures as they are, but also, to “look and act the part” of a distinguished professional.

Consequently, the theme of conservative, formal attire and personal presentation are critical to medical school success. Female aspiring physicians describe the institution’s laser focus on their appearance, which adds an additional burden to their medical training, as the obsession with the “right” image and presentation is stressful for them in addition to the constant academic pressures. One medical student explains, “I always felt I understood what it meant to be professional and I always abided by that but I never limited my expression - but it seems like that's a huge part of being a female in this field.”

Aspiring physicians reveal that medical schools often have a strict female dress code, in which women are encouraged to wear minimal makeup and jewelry, and are prohibited from wearing bright colors and/or colorful clothing. A female aspiring physician comments, “In order for women to succeed and be taken seriously, we have to work much harder - our male counterparts don’t have to worry about these types of things. There is so much more room for error for a woman, and appearance is one of those potential errors.” Another female student discusses a recent talk the school had with students around professionalism, “More than half the time is spent about talking about female dress code. It’s actually very insulting.” Students report understanding what it means to be professional, but feel that there is an unfair emphasis on it, and that their self-expression is being limited as well.

Some medical school students fear being judged for being too casual, and only wear formal clothing, swapping their t-shirts and jeans for slacks and sweaters, even when they leave campus to “feel the part.” One student explains, “When I’m dressed up, I feel like I can play the part. I know I am progressing in this profession and it makes me feel a little less like an imposter.” Some commit to this not only to feel more like a doctor, but also to be recognized by their superiors, “I look in my closet and sometimes I think I don't want to wear that because my professor will see me, and it won’t look professional enough. I don't want to be seen a certain way by, you know, with deans walking through the halls at school.”

By observing and learning the cultural codes early on, aspiring physicians are aware that appearances are also part of the identity formation process. Medical school is a very traditional profession, and aspiring physicians are socialized to dress conservatively from the beginning of their medical training. This allegiance fosters a sense of group membership and public recognition, which are validating for aspiring physicians new to the profession.

While dressing the part is critical, acting the part is just as essential to establishing a healthy identity formation. Medical school students report feelings of discomfort when observing attending physicians addressing patients in a patronizing, condescending manner. A participant details, “Doctors speak to patients using technical medical terms, which are unrelatable for most patients. A lot of it is, if you're explaining to a patient about something in their brain you're not going to say “the interior part of the frontal lobe” - you have to simplify it to a vocabulary people who aren’t doctors can understand and make sense of. They recognize that communicating this way creates a barrier with

the patient.

One female student discusses, “There is this concept of “old medicine,” where you just listen to your doctor and accept what they say without question. With this model, it reinforces the power physicians have. Now, with modern medicine, I think there is more room for engaging your doctor.” In addition, one female student adds, “If you smile and are extremely friendly, you will be very successful. But if that is not your personality, you will struggle.” The medical student shares that she struggles with this idea - that there is knowledge of a formula for success; however, she will have to majorly compromise her style around communication and relating to others in order to move forward in her career. She is absorbing the messaging that, to be silent, is to succeed.

Navigating Identity

Another critical finding is how first generation students of color in medical school simultaneously existing in separate worlds. They live in a dual reality of their personal existence, versus their professional lives, which carry expectations not only around academic and clinical mastery. They are also expected to understand the “hidden curriculum” during medical school, in which cultural cues around behavior and social codes about the profession are shared and revealed. First generation students of color have described elements of the hidden curriculum being rooted in bias and stereotypes that negatively impact patient care, and serve as an impediment to developing the socio-emotional awareness to practice medicine in a culturally competent manner.

One medical student notes that his cohort recently learned about genetic diseases, and Sickle cell anemia was mentioned. The only detail that was given by the physician mentor was that it is predominant in African American patients, referred to as “those sort of people” and nothing more was explained or said, leaving the student disappointed, stating that “it is irresponsible to provide students with information about a disease in this way.” Should they ask for further clarification, they fear being humiliated. By referring to African-American patients with sickle cell as “those sort of people,” the mentors of aspiring physicians model bias and emotional distancing from patients as part of the hidden curriculum. Medical school students also witness physicians downplaying pain expressed by patients, showing a total disregard for the social determinants of health. This phenomenon has been experienced by several students, who state that medical school instructors ignore the social aspects of medicine. One student states, “I have seen a lack of comfort around people who identify as LGBTQ.”

Members of various cultural communities are labeled, and dismissed according to some participants. For example, a first-generation student of color experienced a physician dismissing patients based on their culture, “Patients with diabetes aren’t easy to categorize, yet our instructors do this. Lifestyle awareness is not being taught; and so doctors start blaming the patient’s culture. A physician told me that Mexicans don’t follow recommendations, so just start them on medication. You know, that really bothered me. There’s a different way to go about it.” That particular aspiring physician is a member of the same cultural group as the patient, and it is evident that aspiring physicians struggle with the pervasive culture of patient-blaming and patient-shaming.

In this way, aspiring physicians come to understand that they are finding mentors

who are not understanding the social problems of medicine, whether it relates to issues of access, patient culture and behavior, and/or prescribed treatments. This type of experience contributes to first-generation students’ diminished morale. Stereotyping and pre-determining patient care comes with serious implications. This isolating behavior leads to other toxic practices, including being unkind to patients after the appointment had concluded. One participant states, “There is some tendency to speak about many patients - once the doors are closed and once patients are out of sight. It seems fake to me because doctors are judging them as soon as they leave yet smile at them and are pleasant during the visit. Who can you trust?”

Although these students are part of a larger cohort, they are not united. Interestingly enough, unethical behavior by medical school students was mentioned by multiple study participants and it is a concern. They report that their peers in medical school are “rude and disrespectful with lecturers, and are “cheating on their attendance and exams.” This level of unprofessionalism starting early in one’s medical career is great cause for concern by this cohort. They believe that normalizing this will undoubtedly impact patient safety and their overall level of care. The data from this study suggests that if there is poor modeling by physician mentors, and a culture of silence and obedience rather than one of communication and dialogue, then this culture will continue to be perpetuated. Aspiring physicians also believe that the intense fear of making mistakes, coupled with academic pressures had led to cases of academic dishonesty.

Tension with Mentors

First-generation students of color experience challenges around having quality mentorship. An additional preparatory gap identified is aspiring physicians’ unfulfilled yearning for mentorship, particularly with regard to communication-building and achieving balance in the profession. One aspiring physician communicates, “I’ve met a lot of unhappy physicians; I want to meet more balanced ones, but it’s hard to find a mentor because of the unprofessional behavior I see.” Aspiring physicians who are not members of the doctor dynasty find themselves searching for mentors, and often draw inspiration from doctors they have known at some time in their life. Some aspiring physicians look to their superiors with great trepidation; often times, medical students seek residents for guidance, who have “permanent dark circles” under their eyes. There is an observation of lack of quality of life, and there is reservation and hesitancy around that.

One student states, “I would like more opportunities to connect with people who really enjoyed what they were doing.” What they are witnessing are people who are not currently fulfilled by practicing medicine in mentorship roles. Some of the study participants believe that it is through mentorship that they watch their mentors navigate the demands of the profession: the emotional challenges of medicine with regard to patient communication and accepting the professional culture of workaholism. Their mentors are a reference point for how to practice medicine, and for how they should practice medicine. Positive mentorship is developmentally enhancing, occupationally fruitful, and emotionally stabilizing: to develop strong bonds with seasoned professionals in the field provides a solid foundation in the initial socialization process. It also fosters a

healthy communication style among newly-accepted medical students: one that challenges them to professionally ask for assistance and guidance, and to face increased responsibilities and challenges.

V. The Power of Service and Defining a “Well-Prepared” Physician

Experiences with volunteering and performing community service have positively enhanced students’ fluency around the social problems in healthcare. First-generation students of color report profound experiences around service roles. They affirm that volunteering positively informs their professional identity process with regard to fostering a greater understanding of patients’ mental health, and social contexts, which are connected to their physical health. The students who have experienced serving in behavioral health agencies report an increased sense of the amount of influence and impact they would have as a physician.

One medical school student spent years at a grief center serving young children.

This experience shaped their identity as a “healer”, and gave them the tools to deal with grief and trauma through the lens of children: “Children realized death and loss is a normal part of life. I will be seeing grief a lot - death and sickness along with treatment will be part of my job. Someone’s life is going to be my hands, and it’s a huge burden to carry. The fact that I am on this trajectory, is really heavy for me, but volunteering has taught me how to bear it.” Through this experience also came the understanding of the stigma children face, whose parents died by overdose and/or suicide.

Volunteering in areas with high levels of exposure to bereavement and trauma has given aspiring physicians strategies for balancing the gravity of the role with the most joyful aspects of practicing medicine - impacting lives positively. For every trauma there is a patient who has made a miraculous recovery - what sustains them is the positive contributions that will be made and their long-term goal and desire of helping others will be realized. Admittedly, this self- described juxtaposition of emotions: hope, happiness, grief and bereavement are what drives them to practice medicine in the first place.

Another medical student, who had experience serving as a suicide hotline counselor, thinks “that every medical student should go through suicide prevention training because you learn how to have an empathetic conversation with someone undergoing a really tough situation.” Volunteering in this capacity allowed the aspiring physician to not only give patients tools to cope with traumatic situations, but also, to give them the ability to foster trusting relationships with patients, with whom they established deep, long-term connections. Mastering the aspect of forming powerful connections allows the medical students to feel valued by patients, and also serves as an affirmation of their decision to pursue medicine.

Further, volunteering in their home community at the border has fostered a passion for global health and welfare. One participant states, “I spent time volunteering for a program that is sponsored through our church. Physicians built a clinic in Rocky Point, where they offer free healthcare. The physician comes down, and so does the therapist and the pharmacy tech does too, with the three most common medications needed, and we see patients all day.”

This student was reminded of her value to the field of medicine as someone who can make a meaningful connection with patients because of her ability to relate well socio-emotionally with others, and because of who she is as a bilingual Latina who understands the plight of families who live on the border: “I was able to translate for the physician and so I think that was really enriching because that was always something that I wanted to do - it was very rewarding.” This type of service reinforced her power and place in medicine, and service to others has the opportunity to do that. Through service, she is using her voice to create social change through medicine.

Additionally, students volunteering in hospice discuss an experienced reinforcement of appreciation for elderly patients; many of whom, already have this value due to their roles as caregivers. What their volunteer experience at the bedside showed them was the incredible loss elders face as they live to old age: the majority have lost spouses, siblings, friends, and even adult children. Many are living alone, aging in place, and are in need of daily supplies, food, and housekeeping services. Additionally, hospice volunteering helps aspiring physicians understand their own mortality: “I know death is a is a natural thing in many cultures, including my own, but we learn in medical school that the whole point of medicine is to try and prevent that - so it's a weird dichotomy when

you’re receiving the message that death is the ultimate failure. Death is celebrated in my culture, particularly if it is the passing of an elder.” Through serving in hospice, medical students are able to negotiate a duality of philosophies around end-of-life issues: the natural passage of death after a long, well-lived life versus what they are learning in medical school.

Through volunteering, first-generation students of color also gain a sense and understanding of the value and fundamental utility of self-care: “I think that was a big change that developed with me as I started to recognize my emotions a lot more, and how I need to take care of myself as well, and when I need to just say, okay, I need to have someone else help out right now on the unit, I need to take a break.” Not only does practicing the value of self-care foster confidence and the critical leadership skills to advise patients regarding their health, but also strengthens aspiring physicians’ tools for communicating their personal needs.

From these varied opportunities of service, first-generation students of color view physicians as a servant leaders, focused on relationship-building, learning to empathize with others different from oneself, and being with others when they are at their most vulnerable. One student states, “A good doctor knows how to bring about positive change in the physical, emotional and mental well-being of patients.” Another student discusses that physicians who understand an “intergenerational and intercultural perspective,” who values the perspectives of all community members, and recognizes the social problems that often accompany medical issues, is what being a physician means to them. Their definition of a physician is comprehensive, and all-encompassing.

FINDINGS: THE DOCTOR DYNASTY

Roughly half of the students I interviewed are members of a long lineage of physicians who belong to the doctor dynasty. Having parents and grandparents in medicine provide medical students with a realistic sense of the rigors of a medical education, and the overall culture of medicine. Therefore, the admissions process, and the process of “becoming” a physician is much more familiar; therefore, the students experience less “culture shock.” Members of the doctor dynasty report benefitting from their parents’ advice and lessons learned from practicing medicine, as they share that mentors who are not relatives have been less candid than their parents.

One student states, “Most doctors don’t tell you about the hardest parts of the profession. We don’t learn early on - how serious it is with malpractice, lawsuits, etc. We only know this from our parents, who have experienced it first-hand.” Having insider knowledge, perspective, and guidance, along with a roadmap and tools to get there, members of the doctor dynasty are highly prepared to enter medical school.

Another student explains, “My father shares his struggles, what he has been through. He left medical school, and returned after I was born. His story has prepared for me the professionalism that comes with medicine, and a realistic sense of medical school and the workload involved.” With a pre-established fund of knowledge, members of the doctor dynasty are aware of the culture and expectations of medicine and are equipped

with the resources to prepare from an early age. Members of the doctor dynasty report ongoing exposure to science and medicine growing up: “I attended STEM camps, mini medical schools, and always had a tutor if I needed.” Being groomed to practice medicine along with having years to perfect a command of the medical culture, the process of becoming physicians for members of the doctor dynasty is predictable. The process is familiar, the student is aware of what is needed to compete in the process, and several students have obtained Master of Public Health (MPH) degrees before even applying to medical school.

Members of the doctor dynasty are socialized to embark on the pathway of medicine from an early age, and are fluent in the medical establishment rules, language and culture of being a physician. Member participation in the doctor dynasty reinforces the profession of medicine as an elite social club accessible through bloodline and predetermined socioeconomic circumstances. This social phenomenon does not necessarily foster a devoted lineage of physicians committed to advocating for underserved communities.

For example, several members of the doctor dynasty expressed that they are entering the profession with the goal of “dedicating their life to science,” and not to “be a therapist or counselor.” This is an important finding to note, as this cohort presents a focus on clinical mastery, success in the laboratory, performing clinical research to find cures for rare diseases, working on biomedical pursuits, and sustaining the family’s status.

The pilot study of 2017 revealed, the doctor dynasty has been a notable phenomenon, and this study presents a similar finding. With complete access to both informal and formal social networks, aspiring physicians belonging to the doctor dynasty have access to not only the information and process of becoming a physician, but also to the resources and connections to enhance their professional profiles as applicants. One medical student states, “I have shadowed my neighbors and family friends from high school onwards.” Some medical students have even pre-selected their medical specialty due to increased exposure to the profession (they already have chosen long before entering medical school), and state that their family members in medicine have “provided valuable insights into the profession.”

Further, The doctor dynasty is not only something that exists unofficially as a point of access and reference, but also is a recognized formal part of the application process. There is a section on the American Medical College Application Service (AMCAS) medical school application that asks for parental occupations, and aspiring physicians are able to highlight their status as physician kin. Additionally, in 2012, the University of Arizona College of Medicine implemented a legacy process as part of their admissions review, as many medical schools do. According to the policy, “those who have a sibling, parent or grandparent who graduated from the UA College of Medicine – are guaranteed a first interview. With regard to doctor dynasty enrollment percentages locally, “Of the 117 students enrolled in the University of Arizona College of Medicine – Tucson Class of 2019, 14 were legacy applicants. And of the 115 enrolled in the Class of 2018, 10 met the definition of “legacy.”

With feelings of great familial duty and pride, members of the doctor dynasty

report feeling a sense of duty to continue the pathway of medicine. One medical student noted that becoming a doctor is “a return on my parent’s years of investment in me. To whom much is given, much is expected.” The aspiring physician citing the Parable of the Faithful Servant, implies that a component of the doctor dynasty is a predetermined familial expectation that the next generation will continue the family lineage of physicians. Raised with privilege and inherent advantage of economic resources, access and social capital, members of the doctor dynasty have a keen understanding of the profession they are entering. This institutional knowledge provides them with every advantage in not only the admissions process, but also during the socialization process. They have understand the professional culture and expectations of medicine.

Through social priming and grooming, while perpetuating a sense of obligation, privilege is given to offspring for the purpose of maintaining family “honor and status.” One member of the doctor dynasty states: “My parents opened doors for me in a very real way. All I need to do is call one of their friends if I need a doctor to shadow, a lab to research in, or someone to write me a letter of recommendation. If I was interested in something in particular, I could easily be connected to that opportunity.”

The process of becoming a physician is seamless for those who have access to physicians on standby. They are experiencing what it means to become a doctor from a very early age, and this process is a continuity of their identity and a life they already know. Unlike first-generation students of color, who are the minority of students in medical school, there is no disruption to their identity formation process. Members of the doctor dynasty know what to anticipate, and are complicit in their identity development and socialization.

Doctor Dynasty Members’ Socio-emotional Preparedness for Medicine

It is clear that coming from a family of physicians has great advantages. Research by Elam and Wagoner (2012) supports that having an alumni connection may provide a distinct advantage to medical students in the following ways: “Students from physician families tend to be well prepared for the rigors of medical school, and they have a good perspective of what they’re getting into.” In addition, Elam and Wagoner (2012) note that having parents from a medical background allows medical students to “have easier access to shadowing experiences in medical settings through their parents’ contacts.”

While the phenomenon of the doctor dynasty is not new to our society, data from interviews reveal that members of the doctor dynasty feel prepared to work with patients who have a curative trajectory. They report feeling less prepared to work with patients they have an established rapport with who have a terminal illness; once a patient becomes truly humanized to them, that’s when they begin to feel most unprepared. One research participant states, “I don't know how it would feel to be working with this person for so long, to develop close connections, working around the clock trying to help them to make their lives better and to all of a sudden come to the conclusion that I have done my job and all I can do now is to live this bad outcome with them.”

The research subjects also revealed their sense of not feeling prepared for colleagues suffering from severe mental health issues, and dying by suicide. This was raised by a student who had just attended a medical school event around physician suicide prevention day - a very positive piece of programming for medical schools, who

have a fundamental responsibility to shed light on the perils of the profession: “I know physicians are burned out and unhappy - when you’re at your max. Watching people sick all of the time can be such a hurdle.”

The sudden deaths of infants and children, is another socio-emotional trigger for these aspiring doctors. A medical school student recently encountered a ten day-old baby who was unresponsive, and “It made my heart sink, and emotions run higher with kids I would say, just because there is innocence and there's so much of their life that they haven't lived yet.” For others, seeing their peers suddenly die before them makes a lasting impact on them, and reveals a brutal reality for their age-group. Another students mentions a college-age student hit by a car, which resulted in brain death. He explains, “the brother was trying to tell his mother over the phone in California what happened but couldn't because he was so emotional, so then he passed the phone on to the surgeon and so I was in the room for all of that.” These are examples of emotionally-charged cases where “fixing” cannot occur. Aspiring physicians anticipate that one day, they too, will lose a patient, and/or may have to make a phone call to deliver the worst possible news.

An interesting finding to note from interviews with members of the doctor dynasty include their communicated concerns around “dealing with people who are very frustrated with the medical system. How can I possibly address that?” In this sense, the medical students are not wanting to own meaningful interactions with patients and listen to their concerns. They reject their ability to change elements of the system that are not reaching everyone fairly. Additionally, one student discussed fear around working with

patients who speak a language other than English: “Communication with patients in another language is something that I am not ready for - how do you portray a condition in another language?”

For as much as members of the doctor dynasty know about how to be physicians, cultural awareness and taking ownership of social barriers to medicine is a deficit among the group in several ways. Education around the resources healthcare settings provide such as translation phones, familiarity with social services and other resources that would aid in the facilitation of a comfortable setting for the patient would contribute to their competency as a physician. In addition, when asked about their experience with disability, one medical student reported that they are discussing disability in their current medical training “in relation to bioethical issues.” Their association with disability as it relates to clinical care (i.e. as a product of a medical mistake) is a narrow perspective and one that is tied to the medical model of disability.

The Role of Service and Defining a “Well-Prepared” Physician

Members of the doctor dynasty report that volunteering has supplemented their clinical knowledge with information pertaining to having difficult conversations with patients and families, navigating the healthcare industry, and understanding prevalent physician biases in medicine. One of the dominant experiences that contribute to shaping aspiring physicians’ understanding of what it means to be a doctor is volunteerism, as a practice to prepare for creating a fundamental relationship with the patient. Since most

medical schools do not emphasize socio-emotional experiences throughout their curriculum, volunteerism is a way for aspiring doctors to gain essential communication skills beyond taking a patient’s clinical history, even prior to beginning medical school.

A member of the doctor dynasty explains, “I hadn't started coming to grips with the emotions of medicine until I started volunteering.” Emotional regulation, the ability to modulate emotional behavior and appropriately respond to patient traumas, is a critical skill needed by physicians. Being able to practice this modulation prepares students for the sometimes harsh realities of medicine: at times, treatment plans they designed may fail, medications they prescribed may not work, patients will decline under their care, and sometimes they may not know the answer to a complex case they are trying to solve. If medical students begin to develop appropriate communication skills, they will be able to care for their patients in a more thorough, and thoughtful way, with the appropriate level of objectivity.

Serving in the hospital setting allows aspiring physicians to define a well-prepared physician as someone who can swiftly navigate the fast pace of medicine while making critical decisions. This corresponds to doctor dynasty students defining physicians as being “experts in their field.” A component of this expertise is "thinking like a scientist" while “not letting personal beliefs cloud clinical judgment” and “not promising more than you can deliver.” Additionally, students also define well-prepared physicians as those who are “extremely knowledgeable about various treatments, medications, cutting-edge research, in conjunction with giving credit to colleagues in various healthcare professionals when it is due.”

Additionally, members of the doctor dynasty have volunteered abroad in international clinics. This experience has allowed them to define the role of a physician as a devoted problem solver; when medication and modern treatments are not available or accessible, they need to create a holistic treatment plan. Living in home-stays around the globe, students learn that alternative medicine and integrative treatments beyond traditional medicine are regularly practiced out of necessity. Serving in this particular setting allows students to understand physicians as resourceful detectives, discovering novel ways to diagnose illnesses - for example, in some international settings, physicians test for disease without the ability to perform blood work.

Community Problem Solver vs. Clinical Problem Solver

In comparing this phenomenon, it can be noted that both first generation students of color and members of the doctor dynasty define the role of a physician in varying way. First generation students of color define the role of a physician as one that is a community problem solver and servant leader. They define the physician as a respected member of the community who seeks to partner with patients around their care, solve greater public health issues by employing a strong primary care focus, and by highlighting universal access to preventative medicine and wellness programs. Contrastingly, members of the doctor dynasty define physician as a clinical problem solvers, dedicated to solving complex issues in medicine. Through their definition, physicians take on a detective-like role, to employ a curative approach to disease, and

investigating and eradicating disease. In this sense, there is a different perspective on defining values of a physician because of the varying lens they have. Their different realities provide very little sense and understanding of the others’ experiences.

According to Lawrence (1990), physicians as community problem-solvers need to possess skills that include the “knowledge toward health promotion and disease prevention, have insight into their own personal health behavior, demonstrate confidence in their own ability to counsel, and their beliefs about patients' interests in health promotion advice.” Further, enabling factors include “competence to perform preventive services, adequate payment for rendering preventive services, a practice setting that is organized to facilitate counseling activities, sufficient time in the schedule to provide health promotion services, an efficient reminder system, and a coherent set of guidelines that are perceived as scientific and unambiguous.” Finally, Lawrence R. (1990) states that reinforcing factors include “peer support, positive feedback from patients, evidence of intermediate results such as improved health behavior among patients that are predictive of ultimate favorable outcomes, and enhanced self-efficacy about fulfilling one's role as a healer.”

DISCUSSION

I. Summary of Findings

First-Generation Students of Color

Using Seidman’s three-part interview process allows for the experiences of two very different groups among the interviewed cohort to emerge: first-generation students of color and members of the doctor dynasty. These are different cohorts with a variety of histories, experiences, and backgrounds. Through one exploratory case study, a duality of experiences and concepts have emerged. In addition to experiencing barriers to accessing healthcare, themes from the lives of first-generation students of color include early experiences with caregiving, the importance of serving one’s community, and

understanding cultural components of health and medicine.

By employing a three-part interview model with 15 newly accepted medical school students, this study reveals differences in the identity formation process among two student groups, their divergent realities, how their personal contexts inform their perceptions of the role of a physician, as well as what their values are around the practice of medicine. Medical students’ volunteerism inform their strengths, weaknesses, and reinforce what they hope their physician identity will be.

First-generation students’ developmental process is disrupted by a variety of factors. Data from subsequent interviews around pursuing medicine reveal the following emerging concepts: being institutionally re-routed, feeling isolated, negotiating the hierarchy of medicine, navigating identity, and experiencing tension with mentors. While these factors serve as obstacles, these students have made it to medical school, and have successfully pushed back on the limiting factors through their resilience and perseverance. This is something to be acknowledged and celebrated.

First-generation students of color experience a diminished morale while pursuing medicine, and this is largely due to their exposure to the hidden curriculum of medicine, and its discriminatory nature, with a pervasive culture of patient-blaming and patient-shaming. This culture of submission to authority and/or being professionally punished for challenging an established physician is something aspiring physicians struggle with. The process of becoming a physician is overwhelming. There is a great deal of shifting that occurs: personal values, relationships with others, the comfort level with the new

environment, a change in daily patterns and balancing. Although they face current stressors in medicine, their early life stressors provided them with the socio-emotional fluency needed for practicing medicine. First- generation students of color can easily identify members of their class who were born with privilege and access to resources. This dynamic remains visible for those to whom privilege has not been granted.

First-generation students of color are part of the ongoing, systematic discrimination against people of color in health care, education, and related institutions. Additionally, they are discriminated against in ways that are less obvious to their doctor dynasty peers. Understanding the experiences of patients firsthand due a variety of personal circumstances, they are a resilient group who know firsthand where the gaps in our healthcare system are. Their process of becoming a physician is interrupted by a series of setbacks, and obstacles that can feel isolating, according to the students.

For first generation students their color, their powerful context of being part of existing systems of oppression, leads them to recognize biases and stereotypes within their training and socialization to the profession. Given their perspective, they are responding to experiences that they may have had in the past. They have experienced inherent and systemic racism and marginalization, and are sensitive to the reproduction of inequalities they experience being fostered in healthcare. Their experience lacks both positive mentorship that encompasses developmental advising, which members of the doctor dynasty have ready access to, as well as the mindset of reassurance that there will always be a safety net to catch them.

While the first set of interviews created an impression of how first-generation students experienced life early on to inform their identity and context, the second and third interviews provided information on how this group experiences the socialization and professionalization process of being accepted to medical school. They manage repeated challenges.

The Inherent Socio-emotional Fluency of First-Generation Students of Color

Having the capacity to identify with patients, first-generations students of color are being socialized into a profession where they are seeing the systemic racism practiced in medicine, and feel isolated and silenced as a result. With their collective goal of helping disadvantaged communities, first-generation students of color are experiencing a disillusionment when they come in contact with this socialization process. What contributed to their sense of voicelessness is the low quality mentors they encounter, where obedience is expected.

This cohort is incredibly resilient with regard to the institutional barriers that are in place to halt their progress. They are entering a healthcare system that is set up to not serve the communities of which they originate. First-generation students of color have experienced trauma, have served their families as young caregivers, and are familiar with losing stability and control in their personal lives. Their lived experiences have provided them with the socio-emotional tools needed for medicine: empathy for others, cultural competence, and an understanding of the systemic discrimination and biases of medicine. They know the current model of medicine impedes the care of their larger, diverse community of people who are not currently allowed to partner with their provider around their care.

First-generation students of color in medicine reveal their commitment to building community health and empowerment through their roles in medicine, and have a unique perspective as medical students of having experienced systemic barriers to accessing quality healthcare throughout their lives. They also have the ability to use their experiences and voice as an incentive, and as a level to critique the larger establishment of medicine. Only they can speak to the barriers they face. The process of becoming a physicians for first-generation students of color is largely disruptive, and places a heavy socio-emotional burden on them. Through service opportunities at the border, in community hospice, and behavioral health settings, their focus is largely external. Volunteering reinforces their powerful contributions to the field of medicine as culturally competent professionals, mindful of emotional health/grief/bereavement, as well as how political systems impact health care delivery.

Volunteering also provides an outlet for students to practice emotional self-care, which is critical given how disruptive their pathway to medicine is. Their significant life experiences inform their values of a physician as a community-minded servant leader. To them, practicing medicine is about creating social change, and empowering communities through improving collective health outcomes, focusing on prevention, access and primary care - the root of all wellness.

Contrastingly, members of the doctor dynasty have social network and contacts for success, economic support, and the privilege of having insider access to the culture of medicine. Members of the doctor dynasty have insider knowledge from parents and grandparents, who serve as consultants, coaches and mentors. Based upon their socialization process to medicine, which is, essentially, a continuity of their existing

life/lifestyle, members of the doctor dynasty reveal that to them, a successful physician is a clinical master who is successful in the laboratory, a frequent publisher, works on biomedical pursuits, while sustaining the family’s status.

They reported that they did not feel prepared to lose patients they have become close to, and were unsure how to address mental health issues in their peers. They report not knowing how to manage situations that are not able to be medically fixed. For members of the doctor dynasty, having greater self awareness around their inherent privilege and role in perpetuating how our current healthcare system operates would be advantageous to making progress. Rather than learning how to cultivate their own tools for communication, requiring a deeper investment on their part to establish a trusting partnership with the patient. It is this medicalization that allows physicians to remove themselves from the responsibility of engaging with the emotional labor it takes to work with someone who is seriously ill and/or dying.

II. Contributions and Relationship to the Literature

Strengths that First-Generation Students of Color Bring to the Medical Profession

This dissertation contributes to the literature regarding the need for reform around first-generation student of color supports in medical school, more specifically, with positive mentors. By highlighting the inherent strengths of the group, along with the elements that contribute to the disruption of their professional identity formation, this dissertation challenges an existing medical education model that is failing students that are not part of the doctor dynasty. While literature exists around physician identity, there has been very little focus around the identity of those who have been just admitted to medical school, and who aspire to practice medicine, as well as their perceptions of practicing medicine on an emotional realm from the perspective of a first-generation medical student of color. These students view physicians as professionals committed to serving the underserved, solving social problems through science. They view themselves as educators, community members, and leading alongside the people.

Further, first-generation students of color bring profound emotional insights to the field of medicine. From the small sample in this study, students discussed their experiences around having chronic illness, living with a disability, and being a victim of sexual assault. Their emotional insights around the central theme of voicelessness is a contribution to the literature. The female student who discussed her experience as a

victim of assault, and not being taken seriously when taken the the hospital, aligns with the literature of Norman (2017) and the overall phenomenon of women’s pain being minimized in medicine. Findings from a student with a rare chronic disease contributes to the literature of Norman (2017) as well, with regard to how patients with chronic conditions feel a greater social cause to help others who lack a voice and a community. During interview two, this student explained that living the experience as a patient allows her to understand the patient experience, that can involve fear, trauma, and concerns around the course and cost(s) of treatment and/or recovery.

New Understandings of the Identity Formation Process

This study also serves to provide new understanding of the identity formation process of students. The process of entering medicine is disruptive for those who historically have not had access to the profession. For those who have had generational access, the professionalization process is a continuity of what they already are accustomed to. While I anticipated that my findings might have focused more exclusively on curricular issues, rich data emerged from both groups with regard to the hidden curriculum - how first year medical students from various backgrounds experience their process of socialization to the profession through behaviors and social cues. Through these cultural cues, attending informal and formal events, meeting mentors, performing academically, students have explored and unpacked their process of “becoming” a physician on a developmental level. With regard to the hidden curriculum, literature has illuminated that the hidden curriculum of medicine is based on obedience, respect for the hierarchy of medicine, and tolerance for abusive behavior rooted in fear that trickles down to the doctor/patient relationship.

The Role and Impact of the Hidden Curriculum

This exploratory case study presents findings that contribute to the body of literature by providing additional insight into the aspiring physicians’ developmental process. Although they have just started their medical training, first-generation students of color report feeling lonely as well as a decline in morale due to their exposure to the hidden curriculum. The research supports the assertion that medical school climate has a significant impact on the overall morale on the students that it educates. Beyond the established clinically-focused curriculum is the “hidden curriculum” of medicine, as defined by Koff (1989) as “the norms and values that are communicated through the structure and activities of the educational program but are not explicitly taught (as cited in Dreeben, 1968; Stodolsky, 1983).

The hidden curriculum has the ability to impact the developing value systems of aspiring physicians with regard to what mentor physicians determine is a priority by assigning professional values, validating biases, and establishing the culture of being a physician. Having orientation to the profession by birthright, members of the doctor dynasty are familiar with the hidden curriculum of medicine, and understand the cultural cues and codes of medicine, along with acceptance behaviors and practices.

The collective experience of first-generation students of color with the hidden curriculum is that it is, in fact, not concealed. The hidden curriculum’s omnipresence serves as a stressor for first-generations students of color - it is an additional expectations that in additional to the overwhelming workload, they will also need to subscribe to and adhere to a new set of norms, behaviors, values and practices. First-generation students of

color struggle with discriminatory practices that they too have experience, and feel very strongly about their commitment to social justice in practicing medicine. Through their identity formation process, they are witness to experiences that contradict their values and ethos, which often times, are not part of the dominant model of practicing medicine.

This values conflict disrupts their developmental process. Data from this study reveal that these groups do, indeed, experience dual realities and have a split experience of socialization. This understanding is critical in adding to the existing body of literature and recommendations for further study. Members of the doctor dynasty do not report a struggle with values; only, with relating with patients too closely. This is the case largely because these students find their patients and the social problems they experience on a daily basis are unrelatable.

Also, this population of students are not understanding what it is like to be deeply immersed in social problems that plague their communities. The irony of the doctor dynasty socialization process is a portion of them travel internationally to volunteer and serve, to gain experiences with vulnerable populations, when they are living among communities in great need domestically.

Findings have aligned with Wen’s (2014) explanation of her experience becoming a physician. She discussed being a recipient of bullying, having fear instilled in her to the point of feeling voiceless, and became part of a culture that embraced the exercising of dominance and control – which fundamentally contradicts the oath of healing and service taken at the white coat ceremony. Without positive mentors and a lack of outlet for expression, the reported feelings of isolation by first-generation students of color is concerning given the literature on the high rates of depression and suicide, particularly

among females in graduate programs and in the profession. Initial feelings of isolation are risk factors for long-term emotional issues. Some students have already experienced profound mental health issues, and remain vulnerable for emotional triggers.

According to Bergsma, The dissertation findings around negotiating the hierarchy of medicine and institutional ownership has affirmed what the literature has illuminated - that the hidden curriculum of medicine is based on obedience and a deep reverence for the hierarchy of medicine, and tolerance for abusive behavior rooted in fear that trickles down to the doctor/patient relationship, which often is void of a true partnership. This toxic behavior has included victim blaming, patient shaming, and harm to the patient by over-medicating members of various racial and ethnic groups. These interactions between patient and physician are an example of Bergsma’s (1997) micro-political situations “in which the control of information reinforces power relations that parallel those in the broader society, including social class, gender, age, race, and political economic power (p. 18).” First generation students report struggling around this concept of adhering to institutions of control, and fully accepting the power of the hierarchy.

The Challenge of Lack of Quality Mentorship

An additional key finding, given the diversity of this sample, is how first-generation students of color respond to the lack of supports as they foster their professional identity formation and learn to “become” a physician. Their role in volunteering and community service serve as reinforcements of their valuable

contributions to the field of medicine. First-generation medical students of color also have significant experiences relating to and caring for patients, a strength among this population of first year medical students. First-generation students have shown that they are able to sit at the bedside, they are able to have difficult conversations. Above all else, they know and want to listen to patients and their stories. Contrastingly, their mentors exhibit a lack of understanding around the social problems of medicine (pertaining to access, the nuances of the patient/physician relationship, and the racist practice of predetermining treatment plans for specific racial/ethnic groups).

This social dynamic of dominance and subservience manufactured by the culture of medicine is also evident to first-generation students of color. They have concerns around how these practices ultimately impact the dynamic between physicians and patients. This dissertation presents findings around aspiring physicians feeling challenged and troubled by this dynamic, whose framework is rooted in the literature as behaviors that align with the medical model of disability in practice. Yuill, Crinson, and Duncan (2010) not only define the medical model of disability, but also highlight its implications, including how medical school curriculum negatively socializes its students, by assigning them with an identity that is dominant and indifferent to the values and experiences of the patient (p. 2). The medical model of disability reinforces the already existing social barriers between physician and patient, creating a structure that eliminates possibility, and choice from the patient.

Additionally, the medical model also encourages physician disassociation from patients, and mischaracterizes patients with disabilities as being “ill.” The medical model of disability is one example of how medical school curriculum negatively socializes its

students, by assigning them with an identity that is dominant and indifferent to the values and experiences of the patient. This model contradicts the values of first- generation students of color.

Ofri (2017) reinforces the findings of this exploratory research study, and presents perspective around the cultural conditioning among physicians, which is reinforced in the hierarchy to emotionally dissociate from patients. As aforementioned, this is something that first-generation students of color struggle with. Treatments may halt, diseases may take a terminal turn, and physicians owe the patient professional care, and part of professional care is the demonstration of humanity. Chronic diseases and disabilities, often times, are permanent, and patients need ongoing, lifelong support to adjust and adapt to their reality. Physicians cannot rely upon social services and/or nursing teams in hospitals and clinics - it is critical that they participate in the emotional labor of their role. This emotional labor aids in the process of positive professional identity development, which consists of creating a framework for social justice and ethical behavior.

The Notion of Service as a Fundamental Component of Medical Student Identity and Training

This study also contributes to understanding how medical students define preparedness and determine which professional competencies are important to them. With regard to experiences that shape students’ understanding of what it means to be a physician, the literature supports the finding that students of medicine value volunteering and view it as a fundamental part of their training. This is the case particularly with regard to navigating emotionally-charged conversations with patients and families,

understanding the healthcare industry in which they will work, and an understanding of the prevalent physician biases in medicine. Undoubtedly, volunteering has fostered a sense of negotiating their perceptions and attitudes of medicine versus their learned reality of the profession. For example, students who volunteer in trauma-based settings report a gratitude for the valuable experience, and a humbling that occurred upon reflection.

Conversely, being socialized into the profession by residents and other mentors impacts the aspiring physicians’ ability to approach medicine from their own lens and perspective. When the medical student follows a formula to foster their identity, they cannot provide a high level of care. The findings support the literature from Dr.Wen (2014), who states that “more time and better communication leads to a more accurate diagnosis and better care” (p. 58) that is tailored specifically for each patient and their particular needs.

III. Critiquing the Current Framework

This exploratory study adds to the existing literature regarding the traditional functionalist model of professional socialization as the dominant model in medical school. Koff (1989) defines “professional socialization as a "relatively ordered process" (as cited in Mizrahi, 1986, p. 14) “in which physician-teachers as mentors transmit values, knowledge and skills to novices who are essentially passive recipients” (as cited in Merton et al., 1957). This model may contribute to the discriminatory practices and biases from mentors to aspiring physicians that could have profound implications on their educational experience and their professional identity development.

Applying symbolic interactionism as a theoretical framework allows for understanding the meaning that students of medicine assign to their interactions with both patients and families, as well as how they reflect on/and internalize these interactions

personally. This framework challenges the current approach to medical education, and allows for the duality and co-construction of interactions of meaning that aspiring physicians must understand: first, the meaning their interactions hold with patients and families and, second, how these interactions impact them socio-emotionally.

Symbolic interactionism serves as a valuable framework and lens for understanding a healthy, ideal mentorship model, something aspiring physicians crave as, “The relationship that develops between trainees and the agents of their socialization is not unidirectional (as cited by Rosen and Bates, 1967). Trainees are not passive; rather, they simultaneously receive and shape their socialization (as cited by Becker et al., 1961; Bucher and Stelling, 1977; Mizrahi, 1986).” In application, this modern framework would counter and confront destructive, offensive, outdated paradigms of practicing medicine, which operate from a perspective of fear and stigma, which ultimately, harms physicians in training, patients and families, along with physician culture. This exploratory study asked questions related to the interpersonal communication skills acquired by medical students during their professional developmental process.

This dissertation serves to provide a framework for understanding the identity formation process of aspiring physicians from their perspective, as well as learn about their perceptions of how well prepared they feel they are for the elements of medicine that are beyond the clinical domain. Their process is informed by both their observations of medical culture via mentors and their experiences in service learning. In addition to the content saturation and mental exhaustion first-generation students of color experience, the literature presents a disturbing picture of medical culture, comprised of bullying, intimidation and fear.

An emerging concept that arose during this study is that first-generation students of color feel a great emotional burden. Some reported that, the “white coat” to be a barrier to clinical care. Supported by the literature, which states that there exists a culture of voicelessness and institutional hierarchy. A concept emerged wherein, medical students acknowledge that there is an element of their identity that involves loss when they become a physician. They related this sense of loss to the need to adhere to authority.

Coupled with extreme pressures and demanding workload, medical students remain at-risk for experiencing mental health issues during their training. This is one of the most serious implications, and one that the literature highlights from the work of Dr. Pam Wilbe. Some students expressed feelings of shame, isolation and loneliness in their current states. The phenomenon of physician isolation and suicide exists, and these initial feelings of vulnerability over time can pose a true threat to this population, who learn from the hidden curriculum that there are consequences for revealing their vulnerability. Among aspiring doctors, suicide is the number one cause of their death today. This is proof that the isolation and the lack of understanding first-generation students of color feel, is very real, and translates to the culture of the medical profession.

From a methodological perspective, the interview process transcended my expectations of the level of trust I would be able to build with participants over the phone. I was able to establish a very strong rapport with participants. While aspiring physicians who were just admitted to medical school provided me with valuable insight

into the duality of identity with regard to the cohort: first-generation students of color and members of the doctor dynasty, it was the group of first year medical students who had already started their training that were able to delve deeply into exploring curricular gaps in medicine that impact their identity development and their ability to relate socio-emotionally to patients.

Other limitations of the study include conducting the interviews on a compressed timeline, and not employing triangulation. An additional method, such as participant observation, may have strengthened the study by reinforcing emerged themes, and/or even may have presented some new findings. Eventually, conducting a longitudinal study with medical students throughout their four years would be a fascinating way to follow their identity formation process and socio-emotional development, particularly during the third year, when they begin to see patients regularly.

CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

I. Conclusions

Findings from this dissertation suggest emerging grounded concepts surrounding themes of first-generation students of color in medical school persisting in the face of obstacles, feeling misunderstood by peers outside the medical community, acknowledging the doctor dynasty, and negotiating the hidden curriculum, which provides exposure to the hierarchy of medicine and elements of institutional ownership. Professional rerouting has an extremely negative impact on medical students, as they are not surprised by the lack of good mentors – they are used to being misled by professionals who display unprofessional behavior. The observation of unhealthy behaviors reinforces their need for positive mentorship, as they are committed to enhancing the lives of patients and the communities in which they live.

As aforementioned in the findings, not all aspiring physicians pursue medicine to develop a socio-emotional skill set. Members of the doctor dynasty unapologetically reinforced their commitment to curing disease and analyzing pathology. Most do not seek additional training in helping patients cope. For members of the doctor dynasty, the socio-emotional aspect of medicine appears uninteresting, as they place value on clinical expertise, research, laboratory work, and or biomedical fields that do not have the same socio-emotional demands as direct patient care. This provides a sharp contrast to the ethos, values and commitment of first-generation medical students of color.

With members of the doctor dynasty having greater social supports and networks,

as well as access to “survival skills” needed for medicine, first-generation students of color have their own internal survival skills - through experience as members of a healthcare system that has been unfair, discriminatory, and unjust. A resilient group that can withstand profound challenges, first-generation students of color explain that the process of gaining acceptance and entrance to medical school has fostered feelings of not belonging. This sense of being perpetually on the outside is both isolating, and informative for this cohort - as they have the socio-emotional tools to succeed as physician healers. The conflict lies within their values, and how they differ from the larger values of the healthcare system.

First generation students of color are entering the establishment of health care that doctor dynasty members are all too familiar with. This system is a largely dominant corporate model, which is very clinically-focused and driven by profit. This culture persists largely due to our political and economic system. The corporatization of healthcare, much like higher education, mirrors a model where the patient is a commodity to be exploited financially and discharged as quickly as possible because metrics matter above all else. As the years pass, the system becomes less personal, and is more focused on numbers and outcomes.

One of the initial texts that inspired this dissertation, Timothy Diamond’s *Making Gray Gold: Narratives of Nursing Home Care,* makes the connection that the corporatization of medicine has challenged medical professionals to prioritize socio-emotional development s a primary focus on patient care. Instead, the sector demands

focusing on the “bottom-line”: billing, productivity, to maintain patient flow.

From the medical school application process to being accepted to medical school, medical students “pay to play” and are at great advantage if they are members of the doctor dynasty with unlimited access to resources. One of those resources is mentorship, which first-generation students of color acknowledge they lack. They acknowledge that they have an inherent disadvantage because of who they are in the world. However, their life experiences and service opportunities have reinforced their talents and significant contributions to the medical field. Their strengths are their ability to overcome obstacles, as well as their ability to socio-emotionally connect with others.

II. Recommendations

First-generation students of color revealed that they experience social and personal constraints on their journey to medicine. They acknowledge the need and their

own responsibility to advocate for their own professional identity formation. By organizing their efforts, and advocating for themselves collectively, they can reinforce their power as a social group. They asserted that this is how change can happen. This would expose and transform the hidden curriculum into something that would be a powerful contributor to medical student culture, and would transform the way physicians and patients relate and uncover illness.

Based on this exploratory study’s findings, a key recommendation can be made in order to foster greater emphasis on innovative program development. Although, creative programming exists, it is not the norm.

Recommendations include:

I. Partnering with the University of Arizona College of Medicine on hosting group sessions for newly-admitted medical students to process their socio-emotional/professional experiences on a regular basis. This concept of “going off script” is necessary to arm the aspiring physicians with a toolkit that prepares them for the cultural aspects of medicine that they currently struggle with.

II. Banner University Medical Center’s *Talk to Me Program* is in development through Human Resources and Patient Experience programs. This new program will allow clinicians and clinicians-in-training (i.e. residents) to process their emotions with trained professionals. I can work with our team at the hospital to create a pilot for medical students.

III. Since the Association of American Medical Colleges (AAMC) outlines socio-emotional development as a component of medical education for pre-medical

students to master, the implementation of a pre-medical scribe program would offer support to current medical students with their workload. This may relieve medical student academic stress and build the support networks they desperately need (to counter the isolation first generation students of color feel, while giving them the opportunity to have experience and a clearer understanding of the medical profession prior to entry.

IV. The Center for Transformative Interprofessional Healthcare opens their new simulation center in May 2019. This opening can serve as an opportunity to simulate the following socio-emotional concepts:

   A. Recognizing and responding to high-incidence emotional problems in medicine (trauma, grief, bereavement).
   B. Teaching culturally sensitive interventions that will help define values and standards of conduct.
   C. Cultural competency scenarios (featuring examples of disregarding patient symptoms, generalizing about specific groups and/or judging populations).
   D. Recognizing and processing the traumas of medical training.
   E. Understanding patient and family dynamics and interactions, communication styles, picking up on social cues, and learning how to ask personal questions.

V. Mandate medical students to complete volunteer service in the community as part of their training. In this way, they can continue to gain insight and competence by having firsthand knowledge of their communities and demographics they serve.

VI. Creating an intergenerational mentorship program at the UA College of Medicine with first-generation students of color and community-based physicians, so that aspiring physicians can have a professional to connect with regularly, and to process their experience with (and be able to self-disclose). Community-based physicians may welcome the opportunity in their ability to “give back”, and be mentors to medical students, as well as share knowledge learned from their experiences serving underserved communities in the profession.

VII. Another consideration would be to recruit a mentor corps of doctors in the community who are involved with non-profit work and charity work. This would foster a much-needed apprenticeship model in which the realities of medicine could be reinforced by a professional with decades of experience.

VIII. Institutional change can only be made with a commitment to organizing efforts around inclusivity to eliminate structural discrimination in medicine. In order to create solidarity and safety among first generation students of color, the importance of peer-to-peer mentoring cannot be diminished. Building and sustaining relationships with peers enduring the same process is a healthy and sustainable approach to success in medicine.

IX. The College of Medicine had a program I coordinated years ago, called the Med Mentor program. Lasting for 10 years, this program paired pre-medical students with a community physician mentor who they could spend time with. Unfortunately, after I left my advising role, the program was discontinued. A similar program would address the problem of the mentorship gap. In addition to having a mentor, medical students need to

be exposed to community medicine: clinics, patients’ homes, etc. By offering a variety of experiential opportunities, medical students will not only benefit as it relates to working with vulnerable populations, but may feel empowered to be part of a system that they have contributed to. Further, having a presence in the community may enhance their self confidence and help them feel more connected to their patients.

X. I recommend an overhaul within the MMI process, recommendations around creating admissions criteria that reflect socio-emotional competency, and creating a working group for curricular advancement, as medical school curriculum can positive socialize students. Also, opening the Health and Human Values minor beyond undergraduates is powerful.

III. Implications

First-generation medical students of color are a focused, talented group of students with noble reasons to pursue medicine. However, they remain vulnerable to the socialization process based upon their personal narratives and experiences orienting to the culture of medicine. Their ultimate strength is their self-awareness and willingness to be vulnerable in conversation with others. This cohort was candid, honest, and open about their own experiences, and the fact that they did not fear speaking with me, is a indication that they may see the need for self-advocacy in order to facilitate positive change as it relates to their identity formation process and their overall journey in becoming a physician.

It can be difficult for first-generation students to locate support systems within medicine, and for faculty and administrators to recognize when students may need additional support. This lack of community can quickly lead students to feel isolated and question whether they belong in the medical profession or not. These feelings can be combated by proactively connecting first-generation students with robust on-campus

support networks - to actively demonstrate what positive mentor relationships look like after admission is fundamental to ensuring the success of first-generation students of color. First-generation students of color express a desire to have experienced, competent doctors, who have strong boundaries in their lives. They are hoping for mentors who exhibit great care for the patient via significant conversations around their emotional health and well-being in conjunction with discussing their clinical treatment plan.

First generation students of color feel that mentorship will help them establish these clear, healthy boundaries that are necessary to practice medicine healthfully. They also believe it will allows them to find a balance between developing a unique, personal and professional identity while finding their “place” in the profession. Given that there is such little time for developing this skill in medical school, medical students report that this competency around self-care needs to be mastered prior to medical school, because once they are accepted, there is little time to focus on oneself.

Much like the corporatization of the academy, the modern model of medicine oppresses aspiring physicians, as market-like behavior reinforces assembly-line medicine, creating clinicians, not physicians. There is a failure in our modern medical education system to fully address these critical socio-emotional needs of first-generation students of color. Ultimately, these gaps in support and mentorship reflect the values of the academy, and the overall culture of the medical profession as one that is built to serve the elite. This is what first-generation students of color struggle with - the revelation that the corporate medical establishment is not interested serving underserved communities.

Currently, first-generation students of color in medical school are the recipients of their socialization process; they do not feel that they are part of the process of creating

their experience of identity-building. First-generation students of color shared that they need positive mentors who credible and compassionate, worth modeling, and who inspire them to reflect upon their values, principles and self-awareness; to help them understand their unique experiences and expectations for the profession of medicine.

Mentorship, fundamentally, is the mechanism for the transmission of both professional and personal values. This study highlights this gap among two very different groups who are entering the same profession with conflicting values. The voices of first-generation students of color are compelling. They did not have to reveal their feelings and experiences, but they did because they know that their individual and collective voices matter. Medicine is dominated by white elites. While the process of becoming a medical student system is seamless for members of the doctor dynasty, the transition to the profession is extremely difficult first-generations students of color. This cohort is fundamental to the survival of the profession, as they are focused on the broader public purposes of medicine.

Through their personal experiences, first-generation students of color exhibit predisposing characteristics that demonstrate the ability to understand a variety of patient populations. Giving access to their voice enables a deeper understanding of their experiences entering the profession. Socio-emotional implications of being socialization to the profession and their experiences. They emphasized this value as being important to social causes, as the physician serves as a community ambassador of health, someone who is socially engaged and conscious, and a trusted community leader who understands health disparities and remains focused on the personhood of patients when they are at their most vulnerable.

Medical students experience dualities in their socialization process into medicine. I interviewed two groups of newly-accepted medical students on opposite ends of the continuum of history, identity, access and privilege. They approach the profession from a variety of perspectives, from birth, that impact their values around communication, experiences, socialization and professional attitudes. There is much more to learn about these frameworks from the different experiences about these two groups. It would be interesting to learn more about how these themes discovered unfold and/or change, over time, throughout their four years of training, residency, and fellowship. To continue this study, would mean to learn about what the ongoing elements are to their socialization process and how mentorship may be a key contributor to their professional development.

Additionally, this exploratory case study has important implications for further research studies to look at enhancing the developmental experience of becoming a physician. Future opportunities for study would include a longitudinal study of first-generation students throughout their four years, in comparison to members of the doctor dynasty. After the first year, and beyond, I would be able to examine the impact of both formal and hidden curriculum in a detailed manner. This would be one way to shift and/or improve the context by which students begin to develop professionally.

What we learn about medical education and higher education is that privileged students are granted access to the profession by being mentored from birth. Being economically advantaged in the academy is rewarded. What we also learn is that although first generation students of color did not have the economic tools/resources to

traditionally “succeed” in medicine, they gained admission to medical school; although there is a dual reality between these two different groups, their shared reality is medicine.

As more medical schools open in the west next year, (Creighton plans to open its doors in Phoenix, and industry giant Kaiser launches their first medical school in Pasadena), it will be fascinating to learn what their admissions frameworks will be. If medical school admissions processes worked to employ more holistic practices by enhancing and highlighting the importance of personal experience and public service to diversify their pool, some progress may be made.

In addition, medical schools such as the University of Arizona College of Medicine Tucson, are acknowledging the benefits of a more holistic admissions process, by exploring the art of medicine, and recently partnered with the Poetry Center to create an experience for medical students to embrace humanities classes. From the undergraduate perspective, the UA Honors College is hoping to enhance the offerings of their Health and Human Values Minor, and partner with medical students to create a mentorship model through their Commitment to Underserved People (CUP) program. This would allow pre-medical students applying to medical school, and newly-accepted medical students to create a mentorship model early on that can possibly sustain through their years of training.

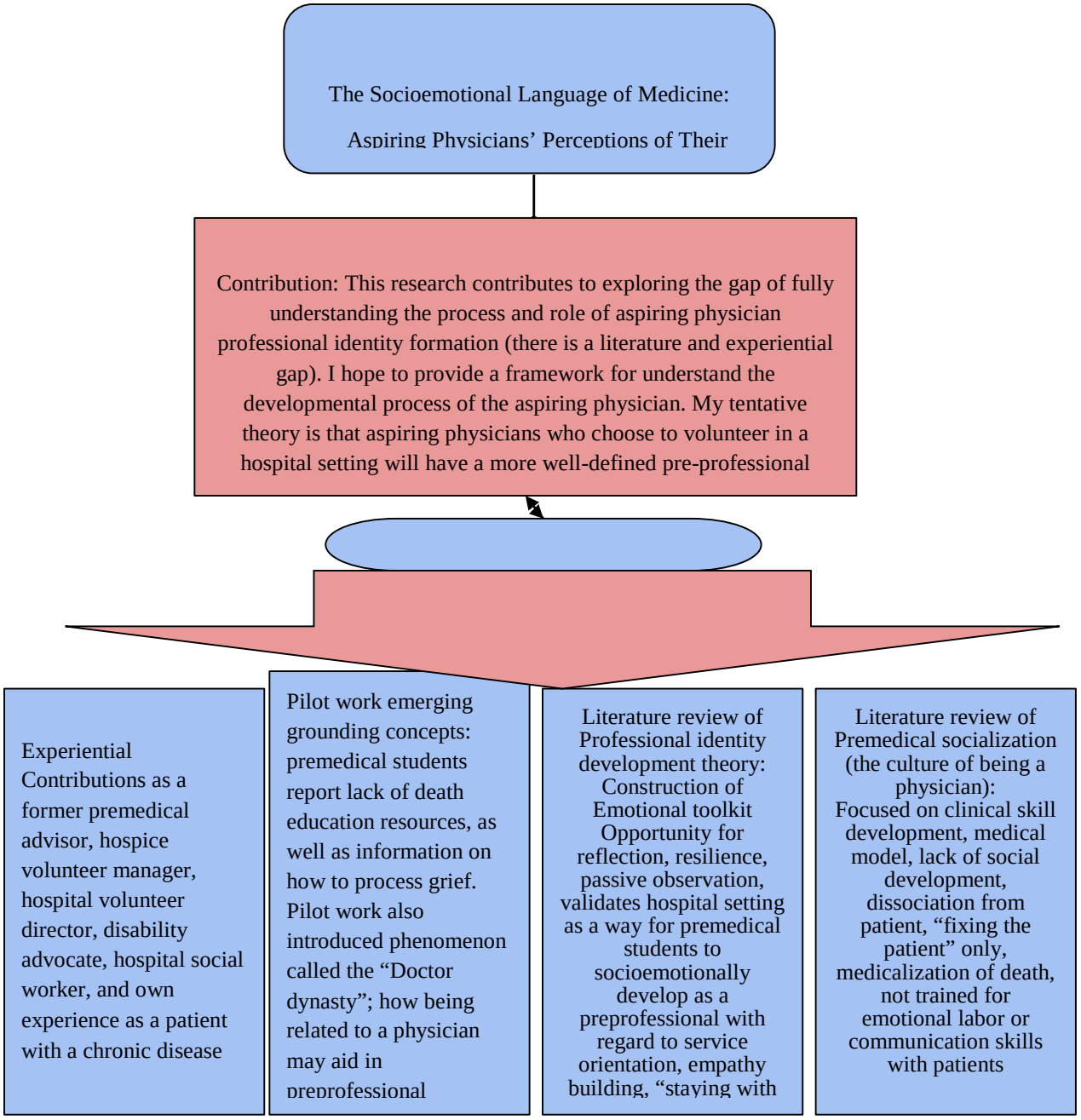
How does one truly learn a language? Compressing it into a tight block of time and reinforcing strict memorization will not bring the fluency needed over time to communicate in a nuanced way. It must be written, spoken, understood and processed in-person, and over time with natives (mentors) who already speak the language. If first-generation students of color were supported by a healthy mentorship model, to be a

hallmark of a medical school program and a staple of the curriculum, the sector of healthcare would greatly be improved.

Providing supports to students would help build the patient-doctor relationship, reduce barriers to communication, create improved health outcomes, and foster understanding in a current climate of socio-emotional ignorance. Most importantly, it would inspire a new generation of physicians to shape their education and participate in their socialization process. As a consequence, they would be able to shape the future of their profession, which is their fundamental right as students of the academy. They have a right to have every tool needed in their professional toolkit to succeed. This is inherent to the survival of the medical profession, and to our communities at large.

APPENDICES

Appendix A - Conceptual Map



Appendix B - Interview Questions Using Seidman’s Three Interview Approach
Interview One: Focused Life History

1. Hello , we will begin our interview at this time. As I mentioned, my dissertation will focus on how aspiring physicians perceive their level of preparedness to work with medically complex patients. I am interested in your feelings about how you’re developing professionally. However, this first interview will focus on your past. I’d like to circle back and talk a little bit about your life history. I’d like to hear about your roots, your family, your school, your early life, and childhood.

2. How would you describe the cultural environment that you were brought up in?
3. What types of things did you like to do as a child?
4. What elements comprise your identity as a person?
5. Are there any previous experiences you’ve had that have impacted your decision to pursue medicine, or your thinking about what it means to be a doctor?
6. Have you had any experience with trauma?
7. Can you discuss any experience you’ve had with death and end of life (including grief, loss, etc.)?
8. Have you have any experience with chronic disease, childhood illness, and/or disability?
9. Can you think of a time when you had to demonstrate resilience?
10. If yes to any, how would these experiences impact your identity personally?

11. Can you talk about whether you have had personal access to physicians in your life (i.e. whether it be a parent, relative, friend, neighbor, etc.)
12. How did you come to be a student at the University of Arizona?

Interview Two: The Details of Experience

1. This next interview will focus upon your present lived experience as an aspiring physician.

2. How did you become an aspiring physician?
3. What were/are people’s impressions of you choosing this path?
4. Can you tell me about what it means to you to be accepted to medical school as an aspiring physician?
5. What is unique about being an aspiring physician in college?
6. How did you decide on your major and minor?
7. Take me through a typical day as a pre-medical student.
8. Which hospital do you volunteer at? (for hospital volunteers)
    a. How did you come to be a volunteer?
    b. Why was seeking this experience important to you?
    c. How long have you been volunteering?
    d. In what capacity have you been volunteering there (what is your role)?
    e. Can you tell me as much as you can about the details of your experience as a volunteer?
    f. How does volunteering in this setting impact your identity as a aspiring physician?
    g. If yes, how so? If so, please explain.
9. If you do not volunteer in a hospital, what types of activities are you involved in?
    h. (Ask above questions based on activity)

Interview Three: Reflection on the Meaning

1. During Interview 1, you mentioned that you had early life experience with X. You talked about how this experience impacted your identity personally. Can you tell

me how it has impacted your pre-professional identity? How do you anticipate your identity evolving as you transition to becoming a physician?

2. During Interview, 2, you mentioned your volunteer experience. How do these experiences relate to you ideas of socio-emotional preparation for medicine?
3. What types of things do you think you will have to do as a physician?
4. What qualities would a well-prepared physician have?
5. What aspect of being a physician do you feel prepared for?
6. What aspect of being a physician do you not feel prepared for?
7. What types of social issues exist in medicine? Are you comfortable working with a variety of patients?
8. What types of emotional situations do you anticipate encountering as a physician?
9. How do you plan to handle these difficult conversations and/or experiences with patients?
10. Given the last two questions we discussed, how do you perceive your socio-emotional preparation for the medical profession?
11. In what ways do you feel prepared to work with sickest patients?
12. In what ways do you feel unprepared to work with sickest patients?
13. What does it mean for you to be a professional?
14. What does it mean for you to be a physician, working with patients?
15. What does being a "well-prepared" physician mean to you? What does having “expertise” mean to you?

16. What experiences have shaped your understanding of what it means to be a well-prepared physician?
17. What factors comprise your professional identity?
18. What is missing from your curriculum?
19. What do you still need to learn? What do you still want to learn?
20. Before we close, do you have any additional questions or comments that you’d like to discuss?

Appendix C - UA College of Medicine Curriculum

Foundations	**Musculoskeletal System**	**Nervous System**
The six-week Foundations block fosters development of skills in evidence-based decision making, self-directed learning, communication, and professionalism, while also addressing medical-based science topics including cell biology, genetics, embryology, biochemistry, histology, pathology, the immune system, microbiology, pharmacology, and biostatistics.	The six-week Musculoskeletal System block provides a basic understanding of the musculoskeletal system designed to help students approach its clinical presentation in their future clinical practice. The block discusses the location and function of bones, muscles, peripheral nerves, and vessels of the limbs; and the structure and physiology of the basic tissues of the musculoskeletal system (cartilage, bone, joint, and muscle). Students are taught to use knowledge of anatomy and the tissues to approach musculoskeletal disease and injuries.	The nine-week Nervous System block is a comprehensive overview of general principles in neuroscience, neuropathology, neurology, neuropharmacology, psychiatry, and social/behavioral sciences. The overarching goals are to introduce students to the structure and function of the human nervous system while integrating related histology, pathology, clinical applications in neurology, relevant psychiatry, psychopathology, pharmacological treatments, and gross anatomy of the central nervous system, head and neck. The course also introduces concepts of rehabilitation, nutrition, exercise and ethical scenarios in cases of terminal genetic diseases, and the use of narcotics.

Cardiovascular, Pulmonary & Renal Systems	**Digestion, Metabolism & Hormones**	**Life Cycle**

The 11-week Cardiovascular, Pulmonary and Renal Systems block is designed to provide students with an in-depth study of the cardiovascular, lymphatic, respiratory, renal and urinary systems using an integrated approach encompassing molecular and cellular biology, anatomy, histology, physiology, pathology, pharmacology, and clinical medicine.	The nine-week Digestion, Metabolism and Hormones block offers an integrated presentation of topics focusing on digestion and absorption of food (carbohydrates, lipids and protein), water, vitamins and some minerals, nutritional aspects of macronutrients and micronutrients, fuel metabolism and storage, and the role of hormones in controlling physiological and biochemical functions in humans.	The seven-week Life Cycle block focuses on the biology and medicine of human reproduction and sexuality, and normal and abnormal development throughout the life cycle. Life Cycle is designed to address reproductive anatomy, histology and physiology through the life span from conception to pregnancy, birth, infancy, childhood, adolescence, adulthood, aging and end-of-life. Life Cycle also presents the cancers of the male and female organs of reproduction.

Immunity and Infection	**Hematology**	**Basic Sciences Capstone**

The eight-week Immunity and Infection block is a presentation of microbiology, immunology, and infectious disease as well as public health and international health issues.	The three-week Hematology block focuses on benign and malignant hematologic disorders, oncologic pharmacology, hemostasis, and transfusion medicine. The block emphasizes integration of systemic pathology with clinical practice.	This six-week course is a comprehensive review of the basic sciences curriculum serving as a culminating and integrative experience to prepare students for the USMLE Step 1 exam and the clerkships.

Doctor & Patient/Societies ***(longitudinal curriculum)***	**Clinical Reasoning** ***(longitudinal curriculum)***	**Pathways of Health and Medicine** ***(longitudinal curriculum)***

The Doctor and Patient block (including the Societies Program) is an integrated program initiated in 2006 to teach clinical and professional skills and to provide longitudinal clinical mentoring for the students at the College of Medicine.	The Clinical Reasoning course is longitudinal and runs throughout the pre-clerkship curriculum during the first 18-months of medical school. It is designed to complement the Blocks, the Doctor and Patient Course, and the Societies Program. Students meet for two hours every week with their Clinical Reasoning facilitator to practice the basic principles of clinical reasoning and prepare themselves for their clinical clerkships. The Clinical Reasoning course uses active learning to emphasize higher-level thinking and support independent thought by the students.	This curriculum runs parallel to the blocks during the first 18-months of medical school. The intent of this curriculum is to provide a longitudinal behavioral, medical humanities and social sciences curriculum, for the medical education program to ensure greater alignment between biomedical science training and the preparation of future physicians required for meeting broader social expectations.

Appendix D - 2018 Core Academic Prerequisites & Recommended Classes

Required	# of Quarters/Semesters	Additional Recommendations
Biology	3 quarters/2 semesters	Labs Recommended
Chemistry	3 quarters/2 semesters	Labs Recommended
Organic Chemistry/Biochemistry	3 quarters/2 semesters	Labs Recommended
Physics	3 quarters/2 semesters	Labs Recommended
English (or other writing intensive course)	3 quarters/2 semesters	

Recommended	# of Quarters/Semesters	Additional Recommendations
Social/Behavioral Sciences (Psychology, Sociology, Economics, Anthropology, Public Policy, Behavioral Health and History)	3 quarters/2 semesters	
Statistics (Biostatistics or Statistics), Anatomy, Genetics, Histology, Pathology, Pharmacology, Physiology, Neuroscience		
Microbiology/ Immunology	2 quarters/1 semester	
Second Language		Conversational proficiency recommended

Appendix E - Comparison Table: Dual Realities

Comparison Table: Dual Realities	First-Generation Students of Color	Members of the Doctor Dynasty
Personal History	Most female, with personal experiences around access that provide socio-emotional mastery and range	Mostly Caucasian males, with long lineage of family physicians
Resources	First in the family to attend medical school, lack of road map, resources, mentors, and economic tools to succeed	Personal support in the form of family mentors, resources, economic tools to succeed
Journey to Medicine	Ongoing rerouting and obstacles	Ongoing support and access
Service Orientation	Serving at the border and with trauma/bereavement reinforced power and place in medicine	International work and hospital service provided perspective on the varied role of a physician based on context
Defining Physicians	Physician as a community problem solver	Physician as a clinical problem solver

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