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“Don’t Rock the Boat:” The Social Reproduction of Inequality in Medical Education

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Abstract

Social factors are the primary drivers of health inequity in the United States, and medical education has agreed that trainees should develop the skills to acknowledge and address them. However, there is evidence that medical trainees remain underprepared to address the social drivers of health in practice, despite curricular innovations dedicated to this aim.

This dissertation is comprised of three papers based on a year-long hybrid ethnography of third-year medical students in the United States. Utilizing participant observation, observant participation, semi-structured interviews, and focus groups, I explore how medical students come to understand their role in addressing the social drivers that shape their learning environment and clinical practice.

Chapter 1 describes the role of the word “interesting” in the medical student habitus. In this study, medical students identify “interesting” as laden with symbolic capital but also deploy it in different ways than their superiors. I find the medical students “perform interested” to climb the ladder of medical education but also extensively use the word “interesting” to capture the morally fraught and oppressive social conditions that shape their learning environment. These findings provide novel insights into the paucity of extra-clinical language in medical education which becomes a form of symbolic violence. Moreso, the study strengthens the calls for the development of a language of structure in medical education to meet the academic medicine’s aim to train physicians that both acknowledge and address the social and structural drivers of health.

Chapter 2 describes “don’t rock the boat” as a guiding principle for medical students in this study. I engage the medical education literature around professional identity formation and offer an analytical turn towards social reproduction and find that students utilize practices like not reporting problematic behaviors in their learning environment to avoid “ruffling feathers,” to secure good evaluations from their preceptors. I also describe how the students acknowledge they are playing the “game” of medical education and articulate that speaking up against the status quo is inherently unsafe for medical students. The medical students communicate their regrets about this, but despite their best intentions, they resign themselves to the game. Therefore, I argue the framework of social reproduction reveals the professed professional value of social justice in medicine is incompatible with the professional dispositions of passivity and individuality inculcated within medical school.

Chapter 3 describes the emergence of organic participatory action research by medical students within this ethnographic research project. Moreover, I describe the process by which medical students fed me “good data” throughout the year. I also highlight how medical students discredit their observations through a process of structural gaslighting. Therefore, I conclude with a call for ethnographies of medical education to intentionally incorporate participatory action research principles to empower medical students with the skills and tools necessary to examine their learning environment and socialization process to become active contributors to health justice. Together, I argue for a move beyond the classic debate of a sociology of medicine or a sociology in medicine towards a sociology by medicine.

I conclude this dissertation with future steps for medical education to address the current misalignment of its learning environment with its professed value of social justice. I call for larger studies in varied medical school contexts to improve generalizability of the reported findings. Immediately, I urge medical education to meaningfully incorporate an extra-clinical language of structure through interdisciplinary social science curricular content. Yet, I maintain that learning a new language does not go far enough: participatory action research and community-engaged learning are two interventions where medical students can practice the work of addressing the social determinants of health. Moreover, I implicate the imbalance of power embedded in medical education as a health equity issue, extending it beyond a learning environment issue. Interdisciplinary collaborations and collective action are critical to flattening the hierarchy within medical education to transform the field from one than prevents physician trainees from addressing the social determinants of health to one that promotes active engagement in social justice efforts.

“Don’t Rock the Boat:”
The Social Reproduction of Inequality in Medical Education

by

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Chapter 1

Medical School has an “Interesting” Problem:

Language and Social Reproduction in Medical Education

Introduction

It is well-established that social factors are the most significant drivers of health inequities in the United States (Link and Phelan, 1995; Marmot, 2005). Medical education responded with curricular attempts to equip learners with the knowledge and skills to address the social determinants of health in their practice. Recently, the Liaison Committee on Medical Education (LCME), the accreditation body for medical schools in the United States and Canada, formally mandated that the medical school curricula recognize and address bias in self, others, and in the health delivery process as part of their standards. The LCME standards includes cultural humility and structural competency as the dominant paradigms to teach around the cultural and structural context of healthcare in medical education (LCME, 2022). However, despite well-developed frameworks, there is evidence that health equity is typically an afterthought in medical education, reducing social drivers to be discrete topics to be taught about rather than undone, all the while prioritizing individual action over collective change (Neff, 2020; Ona, 2020; Sharma et al., 2018).

And, although the consensus in academic medicine is that physicians should have knowledge and skills around addressing health inequities, there is a significant body of literature that suggests that doctors are still insufficiently trained with skills to identify, address, minimize, or eliminate social determinants of health in their practice (Neff et al., 2020). Moreso, studies report medical students' attitudes towards the poor become more negative over time in medical school (Crandall et al., 2009; Wayne et al., 2011). However, medical school curriculum remains the primary vehicle for training for residency, and SDH curricula studies suggest that the delivery must be refined at the medical school level to best shape clinical practice (Ona et al., 2020). Therefore,

there is a need to move beyond attitudinal changes, to empirically evaluate how medical students incorporate acting on the social determinants of health into their developing professional identity.

In this article, based on ethnographic fieldwork, I offer a Bourdieusian (1990, 1991) framing of medical education, drawing attention to the symbolic violence that occurs at the medical student level around the social and structural drivers of health. I show how interest and interesting are forms of symbolic capital that medical students take up in their training. Using the concept of a partially formed habitus, I highlight that the medical students in this study adopt the language of interesting, but also deploy it in different ways than their attendings. Medical students use "interesting" to capture inequitable, oppressive social structures they witness in their training. However, they stop there, effectively concealing the oppressive conditions that shape their experience: an example of symbolic violence. This incomplete inculcation provides a space for critique and intervention for medical educators to develop more efficient and efficacious curriculum around the social and structural drivers of health.

To make this case, I provide a Bourdieusian analysis of "interesting" in medical education. I then describe my research methodology and provide context of the medical school where I completed my field work. Next, I provide an analysis of fieldwork that highlights how "interesting" operates as symbolic capital and is incorporated into the linguistic habitus of medical students, in similar and divergent ways from their superiors. I conclude by arguing that an extra-clinical language of structure is critical in medical education to empower medical students with the language necessary to acknowledge and address the social and structural drivers of health.

Bourdieu's Theoretical Framework

Recently, scholars have evoked Bourdieu in their analysis of medical student socialization to explore how individuals and institutions interact (Brosnan, 2009, 2014; Varpio & Albert, 2013). Bourdieu provides a social theory which interrogates social structures and human agency as interdependent and relational. He conceptualizes symbolic power as "the invisible power which can be exercised only with the complicity of those who do not want to know that they are subject to it or even that they themselves exercise it." (Bourdieu, 1991, p. 164). Symbolic power is central to his theorization of how power is transformed into misrecognizable and legitimated forms of power. He maintains that this power is upheld by less by force and more by symbolic domination, which he coins as symbolic violence. For Bourdieu, forms of symbolic violence include language and communication, which uphold patterns of social domination. He locates symbolic power in and operating through the relationship between those who submit to it and the field where the belief is produced and reproduced (Bourdieu, 1991; Grenfell, 2014).

Bourdieu offers the theory of a field as the multi-dimensional space of relations in which agents are distributed according to their specific volume and composition of capital. He defines four types of capital which determine positionality within and across fields: economic capital, cultural capital, social capital, and symbolic capital. Symbolic capital manifests as prestige, reputation, fame, etc., and it is the form assumed by the other types of capital when they are perceived and recognized as legitimate within a field. Within the field, agents struggle over the monopolization of the legitimate vision of the social world and over the use of objectified instruments of power; in this struggle, agents wield power proportional to their capital, which they bring forward from

previous struggles in other fields (Bourdieu, 1991). A key feature of Bourdieusian theory is language and how language enables individuals to pursue and display their competency in a field. He positions language within cultural capital (Grenfell, 2014).

Each field has its own distinctive "logic of practice," which is ultimately related to the structured inequalities and power relations of the economic field (Grenfell, 2014, p. 101). Doxa is what Bourdieu uses to explain how the logic which underlies the practices of a field to go misrecognized and subsequently unquestioned. Doxa can be defined as the "pre-reflexive, shared but unquestioned opinions and perceptions conveyed within and by relatively autonomous social entities – fields – which determine "natural" practice and attitudes via the internalized "sense of limits" and habitus of the agents in those fields" (Grenfell, 2014, p. 115). Doxa can also be conceptualized as symbolic power as it requires those who submit to it do not question its legitimacy. In this way, the logic of the field is reproduced by the agents who adhere to its doxa in their practice.

Next, Bourdieu conceptualizes habitus:

> The systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing conscious aiming at ends or an express mastery of the operation necessary in order to attain them (Bourdieu, 1990, p. 53).

In simpler terms, Bourdieu argues habitus is "the feel for the game." More specifically, habitus is the "social game embodied and turned into a second nature" (Grenfell, 2014, p. 53). Habitus and

field mutually shape each other and are shaped by the underlying logic of the field. In its relationality with the field, "habitus is the link not only between past, present and future, but also between the social and the individual, the objective and the subjective, and structure and agency" (Grenfell 2014, p. 52). Again, for Bourdieu, a key feature of habitus is language: specifically, the linguistic habitus, through which dispositions around language are shaped by and deployed in the field.

As doxa informs the shared habitus of those agents within a field, habitus generates practices which match the doxa, thus establishing a system of reproduction. Therefore, an analysis of practices offers an insight into the structures which generate the habitus (Grenfell, 2014). Practice should then be understood in its relationship to the logic of the field. Therefore, by studying practices, one studies the underlying logic of the field which structures the habitus.

Bourdieu and Medical Education

Since the mid-twentieth century, sociology has been committed to studying the socialization of physician trainees. Merton et al. (1957) find that the process of medical student socialization is one of learning the rules of the game: a process of stable accumulation of the profession's values, norms, and practices. Becker et al. (1961) conclude that a collective perspective emerges throughout medical school to make assignments more convenient to carry out and to help students make good impressions on the faculty. However, a critique of power was largely missing from these landmark studies.

In response, Friedson (1970) warned that medical expertise was becoming a mask for privilege and power, due to the “extraordinary autonomy in controlling both the definition of the problems [the physician] works on and the way he performs his work” (p. 337). Similarly, Waitzkin (1989) examines how medical discourse leads to medical encounters that convey ideological messages supportive of the current social order. He argues that encounters have repercussions for social control and medical language generally excludes a critical appraisal of the social context. He notes medical discourse, and its embedded ideology, remains a largely unintentional mechanism for achieving consent. Picking up the thread of symbolic interactionism in the 1980s, Haas and Shaffir (1982) offer a dramaturgical analysis of ethnographic data on professional socialization at an innovative medical school, McMaster University. They conclude that students control and manipulate the setting, costume, and scripts to properly enact their roles to their specific audience, donning their “cloak of competence” (Haas & Shaffir, 1987).

In the late 2000s, Brosnan (2009) evokes Bourdieu in revitalization of theory in the sociology of medical education, linking the structuralists with the symbolic interactionists. She offers a bridge between the sociology of medical education’s focus on student socialization with organizational structure with her promotion of “thinking relationally.” Exploring Bloom’s (1988) characterization of medical-curriculum reform as “reform with change,” Brosnan (2009) traces the literature of medical education from Becker to Fox to Foucault and argues that medical education involves the development of lasting disposition with a practical sense of how to successfully navigate the field, i.e., the production of a habitus.

However, Bourdieu's work around linguistic habitus remains underdeveloped in medical education. From a language perspective, habitus corresponds to the social formation of speakers, including the disposition to use language in certain ways, to evaluate it according to socially instilled values, and to embody expression in speech production (Grenfell, 2009). Bourdieu argues that the way one uses language provides insight into the way one takes up their position in the field. He demonstrates that acquiring the disposition to acquiesce to the standard linguistic style of the field provides access to power, and that process upholds the system of domination (Grenfell, 2009). Holmes (2023) describes the process of language socialization as the "simultaneous, reciprocal process of learning to use a language in a given society and becoming a member of that society through the use of language" (p. 8). Though it is well agreed upon that medical education is a course in learning a new language, there is little empirical work around how that process reproduces the field in medical education.

Yet, there is significant literature around the use of the word "interesting" in medical education. Fred (1993) writes "categorizing patients as interesting-or not interesting- is a habit all physicians have… In fact, [interesting] becomes so much a part of us that we rarely give it any thought. We should." This holds true today as Magier and Doolittle (2023) highlight that their PubMed search of ''interesting case'' yielded more than 1000 hits. From their research, they define interesting as a "morally neutral, noncommittal word with the suggestion of the unknown, of a surprise to come, a word to capture our attention before the presentation begins" (Magier and Doolittle, 2023). Throughout the literature, there is a historied debate whether "interesting" provides patients with better care or alternatively leads to their dehumanization (Peabody, 1927; Kompanje et al., 2015). On social media, medical students create memes that generate tens of

thousands of likes about “claiming they are interested in every specialty they rotate on,” post reddit threads that ask “how to answer ‘so what are you interested in,’” and create TikTok parodies of medical students trying to act interested. However, to my knowledge, there are no empirical studies on medical students’ use of “interesting.” In this paper, I aim to take up Dr. Fred’s (1963) call to give “interesting” some thought through Pierre Bourdieu’s theory of social reproduction and the linguistic habitus.

Methods

From May 2022 until May 2023, I completed an ethnography of third-year medical students in the Northeastern United States. At the time of this study, the medical school adhered to the traditional biomedical education model, in which the first two years of medical school are spent in the classroom learning the basic sciences and the third and fourth years of medical school are spent learning clinical medicine. In this model, third year is the first meaningful entry into the clinical environment, and scholars have demonstrated that the third year of medical school is the most significant period of socialization during medical training as students learn how to be a physician and function within the healthcare team (Han et al., 2015; Becker et al., 1962; Beck, 2004). During the third year, medical students move through curricular units called clerkships, which involve five to ten weeks of immersion into a clinical specialty. At this medical school, the third-year students rotate through Emergency Medicine, Family Medicine, Internal Medicine, Neurology, OB/GYN, Pediatrics, Psychiatry, Surgery, and an elective block. Also reflecting national standards of medical education, curricula at this medical school that addressed the social determinants of health was primarily located in the preclinical years and taught through case studies (Lewis et al., 2020). The medical students also participate in a longitudinal course in

clinical bioethics, which met roughly once per month, and a population health thread with lectures on cultural humility and healthcare economics was interspersed. Therefore, this site aligned with national trends, making it appropriate for this study, which was approved by Institutional Review Boards at both the medical university and Syracuse University.

This study began with in-depth semi-structured interviews, which were loosely based on life story methodology (Russel, 2022). I met with nine students, who belonged to one track that would move through the clerkships together, on Zoom, between 45 minutes and an hour and a half, exploring how they were making sense of their medical education to date, their history and future plans, and what role they believed doctors should play in addressing the social determinants of health. These interviews occurred before formal clerkships started.

To understand how the clinical context shaped medical students' perceptions of their role in social justice efforts, I embedded myself as a participant observer during each clerkship. I attended each orientation and mid-clerkship feedback session, didactic lectures, and clinical bioethics sessions. I also joined students on their clinical rotations, attending morning rounds with them on inpatient floors, seeing patients with them in outpatient clinics, observing surgeries in the OR, and assisting in deliveries on the labor and delivery floor. I intentionally varied the context that I observed each student, attending to how the clinical setting shaped their behaviors. And, in each setting, I was attuned to the interplay among the formal curricula, informal curricula, and hidden curricula, the unwritten lessons learned but not intended (Michalec & Hafferty, 2013).

Over the course of the year, I completed more than 500 hours of participant observation. As an observer, I took notes on my whitecoat clipboard, a pocket-sized clipboard used to store papers and write notes on patient lab results and clinical plans. I kept my notewriting similar to the amount of notes that medical students were taking. During my notetaking, I wrote down as many direct quotes as possible. I also noted body language and interactions among students and their clinical teams. To improve accuracy, I would ask the students, residents, and attendings clarifying questions in between patient rooms. I aimed to transcribe detailed fieldworks within 24 hours of observation. To maintain anonymity, all names were converted to pseudonyms and demographics and personal identifiers were altered. To further protect faculty and student identities, I intentionally changed clerkship specialty context as to prevent identification. At times, I also changed language, attribution, and/or setting of quotes to decrease specificity of encounter.

Importantly, to further ensure accuracy, I held two hour-long focus groups with a group of four students and a group of five students after every clerkship. The composition of the focus groups was intentionally varied each clerkship. Each focus group began with students naming and exploring encounters that stood out to them. I would also explicitly ask about their observations of how each specialty addressed the social determinants of health.

For analysis, I used Atlas.ti to code field notes and transcripts (ATLAS, 2022). I approached analysis deductively and inductively as I drew upon the theoretical literature in the sociology of health professions education. For this study, I selectively compiled excerpts of field notes and

interview and focus group transcripts that included the word “interest” or “interesting.” I then recoded these excerpts for themes around interesting.

Reflexivity

As a physician-social scientist trainee, I approached this study with a fractured habitus, aware of the inequities that define modern American healthcare, while also complicit in them (Schlesinger et al., 2020; Sufrin, 2022). Sufrin (2022) argues that this duality enables the critique of the larger healthcare system while also providing short term alleviation of suffering. This dual training lends itself to Seim’s (2021) conceptualization of hybrid ethnography, a methodology which combines participant observation with observant participation, which is at the core of this study. At times, I would hang out in the back of the group, noticing how the huddled clinical team blocked off the rest of the hallway, causing nurses to have to push through or patients’ family members to wait for it to dissolve. Other times, I stepped in to redirect an encounter when I perceived a patient’s discomfort at the types of questions the medical student was asking.

Critically, as an ethnographer studying the site where I completed my medical training, I approached this work with an intentional practice of reflexivity, acknowledging that my ease of access, social status as a white woman in a MD/PhD program, and subjectivity of training shaped my observations (Stuart, 2018). I remained curious about how students and faculty approached me according to the pieces of my academic identity that I shared and why I felt like I had to minimize my social science training in some contexts to “keep the door open” (Reyes, 2018). I also remained attuned to when I was behaving as a participant observer and the contexts which motivated my switch into observant participation. Practically, I organized my field notes to

separate my feelings and personal experiences in the field parenthetically from concrete observations. After completing fieldnotes for the day, I also wrote an analytical memo around themes that were coming up in the field and how they did or did not fit within the literature.

Results

Interesting as Symbolic Capital

From Psychiatry to Pediatrics to Surgery, faculty and attendings overtly conveyed the symbolic capital laden in "interesting." Early into their third year, the director of a clerkship equated interest with resources:

> In general, if you're interested in this field, either you know that that's the career field you'd like to pursue or you're interested in dabbling some more with us in the future, please let [the clerkship coordinator] know. We keep a list of interested students, and that helps us to support you throughout your application process. We keep you apprised of any additional cool educational opportunities, research opportunities, that kind of thing that might come up within the department.

One clerkship director also reminded them that interest was the precursor to resources required for residency: "And anyone who is still interested in this field after all this, come find me, Dr. Schmidt, or Dr. Keller about setting up electives for fourth year and beyond." He expanded upon this, connecting his and his associate clerkship director's interest in medical education to landing them their new roles:

> I'm somewhat new to the clerkship director role. So please, be gentle. But I've been interested in medical student education for a long time in my previous job and when I was a resident, so this is pretty exciting for me. Go gentle on the associate clerkship

> director too because he's adjusting to this new role as well. But he’s been interested in it for a while, and there was availability for him to join.

Therefore, there was a clear signal to the medical students that speaking about their interest to gatekeepers in medical education is critical to advancement through training.

However, attendings and residents also clued the students in on what it looked like to embody interest, actualizing the habitus, to gain the capital required for successful progression through medical school. Specifically, one clerkship director placed responsibility on the medical students to show they were interested through their language to improve the learning environment:

> The [faculty] are excited to receive you, excited to share with you and excited to work with you, and they sort of feed off of the enthusiasm that you put in and the interest that you put in. And so as a teacher when you have a student who is excited to learn and who's curious about, you know, what you have to teach, it just brings it up another level so I encourage you to show that enthusiasm and show your interests in learning and improving as physicians because our preceptors like I said they really feed off of it and helps the whole experience be more enjoyable.

Moreover, during another clerkship orientation, one of the senior residents turned to a professionalism slide that highlighted examples of inappropriate behaviors:

> Inappropriate attire, cell phone use, poor hygiene, disrespectful or ineffective communication, ineffective team members, unethical behaviors, violation of confidentiality, poor attendance, not punctual, unprofessional demeanor.

The chief resident also included being interested as part of the professionalism requirements as she reminded the students:

> Ask for expectations so that they don't think you don't care and are just doing UWorld.[1] Don't just sit in the corner waiting to be invited. This might be hard for shy people, but it's important so we don't perceive you as someone not interested.

Warnings continued during an orientation later in the year, as a clerkship director warned students that if they were to take a lunch break longer than 30 minutes, they may miss something interesting. She doubled down sharing her preference that there would be no lunch break included in the syllabus in order to prevent missing interesting cases. With a slide titled, "Lunch should not be longer than 30 minutes," she said:

> I didn't write this, somebody who is a lot nicer than me wrote this. I would say lunch is zero minutes. We don't eat as a field. I maybe will bring some granola bars. We just snack all day. There is no lunch break for us. I'm not saying that you shouldn't take a lunch. You should go get food. Better yet, bring food in case you don't have time to go get food. She warned them that "the further away you are the more likely you are to miss something interesting."

Effectively, she conveys that eating lunch is akin to demonstrating a lack of interest. Moreover, she suggests that snacking, rather than sitting down to eat a meal, is the way to accrue the most interesting cases, effectively habituating them to her specialty. At another point, a clerkship director even made note that interesting is capital to be leveraged when you are running late to a required call shift, which would generally be deemed as unprofessional:

> "if there's a really interesting electroconvulsive therapy (ECT) case going on, you don't want to be like "it's 430 I have to go" in the middle of an ECT. In that case, then stay and just let the call team know where you were. It's not a big deal."

Interesting was even factored into the clinical experiences offered to students, as residents differentiated which cases they took students to based on its degree of interesting. During an Emergency Medicine shift with Samuel, one of the white, male third-year medical students in this study, he asked Alexis, an intern, if he could come with her to see patients after we had been sitting there for a while. She kind of dodged him and said that "it's really high-level things that aren't very useful, like 'Hi, show me your skin [referring to self-injurious behavior].'" She mentioned that there was a kid with a cough that might be more interesting than the boring shadowing with her. Samuel nodded his head in agreement and sat back in his chair to start doing UWorld questions.

Similarly, during a neurology call shift with Samuel, I asked the residents about their culture for sending students home immediately when they arrive at call shifts, which was intact since my experience as a medical student:

> "I have a question for you. How is it that all the neurology residents know that you just send students home? Is it something you talk about?" I asked. A senior resident responded to me flatly: "It's mostly because I know you're not interested. It's not a rule that we send you home. I did have someone stay last week for an interesting case." Samuel and I nodded our heads and left. Samuel didn't have any follow-up to that as we walked to our cars together.

Equating "interesting" with the success of their future careers, exposure to clinical cases, and the norms of professionalism are clear signals that interesting has been transformed into symbolic capital into medical education. Communicating the word "interesting" is a pass to be late, a

reason to be connected to extra opportunities that improve your resume, and an invitation to see a patient, all offering medical students more capital to secure their precarious position in the field: evidence of the role of interesting in the developing linguistic habitus of a medical student.

Performing Interested

Throughout the year, I witnessed and listened to medical students communicate using the word "interesting" in consistent ways. There was strong evidence that they "performed interesting" similarly to how their faculty oriented them to the clinical learning environment, evidence of the developing linguistic habitus of a physician. For example, during a particularly quiet emergency psychiatry shift with Samuel, he went and heated up his lunch and came back to work quietly on his note. When he sat down, he said to me "I wish this was more interesting for you," extending the expectation to me even as I joined him in the research capacity.

During a neurology lecture while we were waiting for the attending arrive, I observed Rebecca saying to Josh:

> "I'm sorry [the patient] stole your thunder." Josh replied, "Now I don't need to do a presentation, at least." They were talking about a patient with multiple sclerosis. Rebecca said "she really loves [her condition]. She even had the multiple sclerosis awareness shirt on. It's a cool disease. Not cool. Interesting." She corrected herself.

Rebecca's correction from "cool" to "interesting" in the midst of only her peers suggests the game of interesting is one that is not determined by the presence of attendings. This interaction also occurred in the early fall suggesting the inculcation of the linguistic habitus had already taken root.

Furthermore, the medical students describe the rules to the game of interesting and express frustration when they do not get the results they expect. During a focus group, Courtney, a white female medical student excited about a surgical career, shared an encounter she had with a surgeon during her Surgery Clerkship:

> Courtney
>
> It was interesting because I would always ask questions, and she would never answer. I think I think her thing there was like she wanted the residents answer, and then when the resident couldn't, she would. But towards the end of the rotation, I started realizing let me just ask like very, very GI surgery specific questions that a resident can't answer. I was totally trying to play the game because I really just want to be acknowledged.
>
> Samuel
>
> We acknowledge you.
>
> Hannah
>
> How did that feel?
>
> Courtney
>
> I like to think that I'm friendly. It was really bizarre.
>
> Hannah
>
> Did it feel bad or were you just like whatever?

Courtney

It felt like a challenge.

Even more evident of deploying language practices to access symbolic capital, Courtney names the process of getting her preceptor to acknowledge her interest as a game and more specifically a challenge. This is strong evidence for the inculcation of the medical student linguistic habitus.

During a focus group, Rebecca, a white, female student more interested in a career in primary care, also expresses frustration in her reflection on how the rules of the game are sometimes not upheld in the learning environment:

> I heard Dr. Smith talking about how much med students hate the rotation. And I was like 'This is why they're not proactive about teaching us because they just think we all hate it.' I think they think that none of us want to be there, so then you don't even really have the chance to show them that you're interested in it because they automatically think that you're not. One of them didn't even start like being nice to me as a person until I started asking some questions. Hannah, when you were there, I was asking her about late decelerations. It was like the first time she's looked me in the eye and talked to me.

Hannah

Really? Cause she looked like she was friends with you. Just shooting the shit.

Rebecca

> Yeah, I was like ‘she doesn't hate me!’ That was the first time she interacted with me. But I had to like, literally roll up the chair, sit next to her, and start asking questions.

Even though it is clear the medical students absorb this linguistic habitus and can articulate the game, they notice the illogical aspects. Therefore, the inculcation of the linguistic habitus is an incomplete process. During a neurology focus group, James, who had been set on a career in Internal Medicine since his second year, noticed how he felt constrained answering the question about his interest on a neurology call shift: “Well, we had [a call shift] where we were asked to stay. ‘Oh, are you guys interested?’ ‘Yeah?’ He rolled his eyes. ‘Well, why don't you guys stay for a call?’ the resident said.”

Going even further, in the surgery focus group, Kristin highlighted how her honesty and unwillingness to perform interesting broke the rules of the game and compromised her evaluations:

> But it was the most crazy thing because it was like at the beginning of the week with him he asked me like, “Oh, what do you want to go into?” Or he said like, “any interest in applying to surgery?” and I said, “As impressive as surgery genuinely is, I think I don't see myself applying to it because I really love Pediatrics.” And I get so excited talking about it. And so he continued on like asking me about how I learned about that and what I liked about it. So it seemed like a normal conversation and in my eval he says that I expressed I wasn't interested in surgery and that's really not ideal as a third year medical student. That I need to keep my mind open. And mind you right next to this, it says it may be used with the MSPE letters. And so he's saying all this stuff knowing that. I’m embarrassed if my honesty… it’s not like I was “I hate this, I hate this, I don’t want to be

> here." Like absolutely not. And I would like go out of my way to be like "yes! What can I do to help? Oh, do you want me to call this consult? I was in every single surgery. How can I seem more eager and more willing to be there. But because I said I wasn't going to apply to surgery, it's so offensive to you that you write me this horrible eval.
>
> Kristin pulled out her phone for proof: "So this is what it says: 'Kristin expressed that she was not interested in in surgery, which is completely fine. But as a third-year med student would still be mindful of showing interest in all fields, especially early on even if you don't think you'd go into them. There's something to be learned from every rotation.'" How can I express interest aside from being in every single surgery and like going out of my way to ask questions?

Similarly, during the Neurology Focus Group, Rebecca describes an encounter where she did not perform interesting for her resident and consequently felt bad about herself.

> My first call shift she was like, "Are you interested in Neuro?" And I was like, "oh, like, you know." I think it was like a first week of Neuro and I was like, "I'm really interested in Internal Medicine right now." And she was just like, "well, you can just go then." I was like, "okay," but she was kind of rude about it. I left feeling crappy about myself. I was like, "she sent me home, I shouldn't feel bad about this." But it was really awkward. She did not want me there.

The fact that Rebecca left "feeling crappy" about herself suggests the strength and importance of the symbolic capital afforded to medical students through the practices of the habitus: performing interested.

Interesting as Symbolic Violence

Despite evidence of medical students using "interesting" in the way their senior residents and attendings intended for them, the medical students in this study also deployed "interesting" in new ways as they captured morally fraught encounters and oppressive conditions in their training. Rather than using words to implicate the inequitable social conditions that drive the encounters, "interesting" enables the oppressive power dynamics to remain hidden, enabling their reproduction: an example of symbolic violence.

Interesting as Morally Fraught

During a bioethics class, Samuel reflects on the power of medical providers to intervene against a patient's wishes:

> So, this was like my first afternoon shifts in the ED. And a very cachectic elderly female patient came in on a stretcher. She had no pulse. We tried to resuscitate her for 40 minutes because I guess like no one knew if she had DNR/DNI orders. And then we unfortunately couldn't resuscitate her. But then when we met with her family afterwards, it was almost: "Oh, she has stage four cancer like this is obviously not what she would have wanted." So, I just thought it was interesting because it's a very hectic setting obviously when EMS rolls in and there's no pulse. But I don't know it's just like me, even the attending, during their resuscitation was like, "this is kind of futile, like she clearly is ill." We didn't know what she had. But are there ever grounds not to resuscitate based on how the patient appears? I'm sure there are not. But it was just an interesting case.

In another class, Courtney shared an inverse experience from pediatric surgery, reflecting on how the wishes of parents led physicians to intervene despite its futility:

> I just came off with pediatric surgery and it's been kind of interesting, or it was interesting watching the pediatric surgeons intervene in like, critically ill neonates, like neonates on ECMO, who like potentially weren't going to have quality of life if they saved these kids, but they intervene anyway. So, it's just an interesting dynamic to watch. Parents make these decisions for these potentially like non-viable children and physicians are not really comfortable doing the operations that they were being asked to do is a very interesting dynamic in medicine.

In both of these cases, Samuel and Courtney obscured the complexity of moral decision making in medicine with the word "interesting."

Later in the year, during the Pediatrics focus group, I was able to encourage Samuel to go beyond interesting with my prompts to "say more."

> Samuel
>
> I just had like an interesting experience with a gastro patient where there's a kid who like clearly had fetal alcohol syndrome, and like the GI doc didn't feel like he needed to share that information with the mother. They presented because like the kid isn't growing. And they have seen a lot of specialists. But his GI workup was negative. So like, as far as he's concerned, like, no, no issues. That was an interesting scenario. I feel like applies to peds because it was like all the congenital issues. So that was interesting.
>
> Hannah
>
> Say more.

Samuel

It was a really profound experience. I was like, I would hope that if I specialized in that I would take responsibility. And be transparent with the parents. It was interesting. I think it's also interesting just like morally taking care of patients who are like totally debilitated because they have a congenital issue, and their life span is very short. Like I feel like very moved by that experience. Because it's like wow, like we value human life to this degree. Like it's just it's interesting.

Hannah

Can you say more about it being interesting?

Samuel

Yeah, like on peds like when you see someone on like a fully a wheelchair because they like, but it's not a standard one. It's one where like, they can't even like they're super hypotonic. Yeah. In peds GI, we saw some of those cases on tube feeds and like just seeing these parents like care for their children was so moving.

Courtney jumped in:

There were a few like CP patients inpatient that I was just like, 'wow, this is the parents life.' And I don't think I saw that on any other service. Maybe a little bit on Internal Medicine, but I guess I wasn't as emotionally moved by it because you're old or whatever, like you've lived a life. You're not six years old and have ended up being tube fed.

In this case, I probed Samuel to further articulate what is interesting to him about that his experience. He expounded with feelings like "profound" and "moving," expressing the morality embedded within the encounter but concealing the complexity of judgments that are imbued with power dynamics involved in the profession of medicine, suggesting he did not have any other language to describe the scenario. Similarly, during an emergency medicine focus group, Elizabeth describes a series of traumatic experiences. However, she, too, distills them into "interesting," effectively neutralizing the complexity of witnessing a traumatic death.

> I had an MS2 who was shadowing one night with me, and I felt bad for her because we someone came in who was like had been coded for 40 minutes in the field and was basically like, dead on arrival, but like they did the whole thing in the trauma bay. I think everyone else kind of knew that we're gonna see what happens but it's probably not gonna work out. I don't know how she felt about it. She seemed fine, but it was interesting watching somebody else go through it for the first time. And I actually had a chance to talk to the chief resident, and he was actually there from my first traumatic death, which was my first year. I don't know if you guys remember EM shifts where you could in for a couple hours and like hang out? I was there when a guy my age was hit by a car. And his they had to facilitate with police in his hometown to talk to the family in person… not the kind of information you want to share over the phone. But it was interesting because the third-year resident was the intern who was there with me when I was a first-year. So we got to talk about that. He's like, "Yeah, that's not one you forget, that kind of sticks with you." And he was also a patient that was dead on arrival. Like we're going to do all these things… formalities. We could tell the parents we did everything they could but like, he had like brain matter coming out of his ears by the time he got rolled in. So, I actually got

> to debrief something that I really didn't get to talk about my first year with him. This interaction with seeing the second-year kind of go through that for the first time… that was interesting.

I also observed Elizabeth use the word interesting in this manner while observing her EM shift at the community hospital. While we were standing at the doctors' workstation waiting for the team to return from a patient room, the other medical student working asked Elizabeth if she had seen anything while rotating downtown. She replied,

> I saw a couple codes. It was really interesting. We had one person who had been dead on arrival, who was being seen by the medical examiner, right next to the bed of the patient who was there for shaken baby syndrome.

In all accounts, the medical students capture the complexity of painful, morally fraught encounters into the symbolic capital-laden "interesting." Therefore, interesting does more work than simply demonstrate medical students' commitment to their education. It enables complex decision making and the limitations of medical care within inequitable power dynamics to go uncritiqued.

Only in one context, I observed an attending consistently use interesting in this fashion, and this was in their longitudinal bioethics course, a pass/fail class which occurred on Zoom approximately once a month and was led by a faculty member who had training in social sciences and humanities. She opened every class with: "Any interesting challenging cases?" "Any other interesting, challenging situations you've run into?" "Does anyone have any interesting cases or topics you want to bring up? Challenging cases? Medically interesting cases?

Socially interesting cases?" At two different points throughout the year, I observed her use interesting to capture the traumatic experiences physicians must adjudicate:

> We had a new diagnosis recently, a kid who had a bruise on his face where there was a CPS investigation, and he did not need to hear about all of our speculation about whether or not this bruise looked like his father might have done it or not. That's an interesting, that's an interesting one.

She also reflected on the bias that medical professionals bring into their portrayals of the safety and efficacy of interventions during consent discussion:

> But if you ever if you ever have a chance to see someone do a consent discussion, where they're really presenting all the options in sort of an unbiased way versus sometimes, I think, like our opinions trickle in, in terms of how we present things, and how much information we provide. But it's interesting.

In both cases, her use of interesting also notes the encounter as something worthy of consideration but simultaneously closes the discussion to further upstream analysis.

Interesting as Oppressive

The medical students in this study not only use interesting to capture morally fraught encounters, they also uniquely use interesting to denote oppressive structural conditions that shape their learning environment. From the beginning of the year, during one-on-one Zoom interviews conducted in the privacy of their homes, the students used interesting to capture inequitable conditions they witnessed in the hospital. Maya reflected on her clinical work at her elective site:

> It's really interesting none of the nurses are people of color even though the patients are. Like it is really interesting to me, just like the lack of diversity. I wonder what's driving

these patients to come here or not allowing some patients from different populations to come to this office specifically.

Around the half-way point in the year, Samuel shared a voice memo with me:

> Hi Hannah. Good morning. I saw a patient yesterday. She's from Uganda. She moved to America I think three years ago or so not sure the context of the move. She's on the general neurology service because she's being monitored to capture epileptic seizures. She has a history of epilepsy from a very young age not sure exactly when. And she also has a history of chronic migraines secondary to domestic abuse, during which she's had loss of consciousness and trauma to the head.
>
> It's an interesting case. As I mentioned, she's from Uganda. She requires a translator. Yesterday on rounds, we saw all of our patients except her before noon, and after noon, we kind of did table rounds, and then we didn't see her. I saw her with the attending only at the very end of the day. We knew she would take a little bit longer. But I thought that was interesting. That we pushed her care to the end of the day, even though it was not urgent, but still, I wonder if the social… sociocultural context pushed her to receive care later. When we saw the patient, she was very tangential. The interactions that she had with a physician and myself are kind of interesting. Other patients would often you know, focus on that encounter, realize that it's an important one. For this patient, we were doing like a physical exam, neuro exam, and she was on the phone. She was kind of yelling at times, when we tried to even, you know, check her visual fields. And when the attendings hands were near her face, she flinched. Not sure if that was because of the trauma she's had in the past, or because of her headache she was having.

> But I just thought it was an interesting case. Mostly because of the difference and how most patients relate to us versus how she related to us. There's not really like a major clinical decision that has to be made which will be majorly influenced by her cultural context. But I did think it was an interesting case, I guess first of all, because her care was late to the end of the day, because she is from a very different part of the world, and probably has a very different perception of medicine. And third of all just because of kind of how she interacted with us during a physical exam, and as we were getting a history to some degree, I feel like it negatively will impact her care because she's kind of less forthcoming with her history.

Samuel names the barriers that led to his acknowledgement of compromised and delayed care: language barrier, "sociocultural context," trust in Western medicine, etc. However, he sums them up as interesting, unable to implicate the inequity in power that worsened her care. In the midst of their peers and faculty, interesting came up again. During their OB/GYN presentations to their clerkship director and peers, I observed Elizabeth describe inadequate survey measures as interesting.

> So, one thing that was really interesting was that they went out of the way to say that the survey tool they used may not adequately reflect healthcare issues salient to the transgender non-conforming community, as it wasn't reviewed by an individual that was transgender or gender non-conforming.

In these cases, interesting, as a component of the medical student linguistic habitus, functions as symbolic violence because it perpetuates the racist hiring practices, the sociocultural context that

negatively impacts care, and the heteronormative research strategies rather than mounting a critique against the oppressive conditions.

The students also use interesting to describe the oppressive condition in their learning environment. After the OB/Gyn clerkship, Kristin reflected in the focus group:

> Kristin
>
> I worked with Dr. Calvin. That was interesting. I feel like she has an interesting bedside manner with their patients. But I will say like, if I were to be diagnosed with cancer, like I would trust her, like, I know, she's competent. I think with students, I think you can gain her respect. If you show that like, you're interested, and you have the answers to her questions. Yeah, I will say I applied Avaguard wrong, apparently in front of her, and she's like, "whoa, whoa, what are you doing?" (Kristin raised her voice in a belittling tone as she said this). But that's just how she is and she's like, "we'll do it together." But like you know, it's just an interesting mannerism from a teacher.
>
> Hannah
>
> So, I think we've talked about this before, but when we describe things as interesting, I'm trying to unpack what that actually means. Because her mannerisms are interesting, but what's another word to describe her mannerisms to you?
>
> Kristin

Yeah, I think she comes across as really like harsh sometimes like blunt. Definitely if it was me, and I noticed a student was was applying Avaguard wrong… like I was never taught like you're supposed to like scrub your nails and like do one hand I thought you just three pumps and you just lather. And so like if it was me, if I was an attending, certainly you want to prove the point that this is how you actually apply Avaguard. But like, it's your tone of voice and it's how you say it. You know, it's about how you phrase it and your tone of voice. And it was just so blunt. Like, “whoa, whoa, whoa, what are you doing?” Yeah, and I'm like, “I don’t know. I thought I was applying Avaguard.”

Hannah

What did you say?

Kristin

I was like, “Oh, I've already scrubbed in. I'm just applying AvaGuard.” And she's like, “That is not how you do it. Here. I'll show you.”

Hannah

Was it in front of everybody?

Kristin

No, it was actually just the two of us. So it was like, “whatever” but I think she's just, she's blunt. And I don't think she thinks anything of it. I think it's just her personality, to be honest.

Like Samuel, Kristin is unable to expand upon interesting and accepts the attendings belittling tone as a fixed part of her personality. Similarly, during the pediatrics focus group, Kristin uses interesting again to describe another “ruthless” preceptor.

Kristin

It's just so interesting. Like, how is it that you can be like, so ruthless to students and then like… it's like an actor. Like you go into the room and it's like, wowoooowoo (baby noises).

Josh

What does he do? What is ruthless?

Kristin

Like when we're presenting, he would just be like, “Wait, what did you say?” and the tone. And then being like, “Well, is this a typical presentation? What about it? What about their history?” But like, I guess it's fair to ask these questions to an extent but like, it's like the tone. It's the judgmental… yeah, it's a judgment that's clear on his face. It's just so interesting.

Courtney

> Is he doing it as like a teaching point? Or is it just to like, pimp you? Because he knows you don't know the answer.
>
> Kristin
>
> I don't think he is doing it as a teaching point, because he didn't make any teaching points. Like there was no time when he was like, "This is what you should be looking for." Or, "here's what the answer is, and here's why." Like, never… that doesn't happen. It's just interesting.

Like their use of interesting in morally fraught encounter, when the students describe their learning environment as interesting, they do not seek to evaluate it further. Rather, they stop at its invocation, enabling the ruthless behavior to perpetuate in their learning environment.

The students also use interesting to describe problematic or unprofessional behaviors that surprised them. During the Emergency Medicine focus group, Rebecca shared:

> I worked with a resident in the Peds ER, and my jaw was on the floor sometimes the way she was talking to parents. Like she walks into the room, "what's going on?" (Rebecca said this is a rude, short tone). Like, she very clearly did not care. And, it was a kid with an asthma attack. He sounded clear, and it sounded like it was an anxiety attack. We walked out of the room, and she's like, "people like that, they should have to pay for these visits. I swear to God, like this is ridiculous," and then she would go present to the attending and of course, the attending was someone who's also a little crude.
>
> James

Dr. Preston?

Rebecca

He's interesting, man. But she was like, "Man, this kid's dad such a dick head." With every patient, she has something bad to say. And I was just like, "yikes." I was surprised cause this was a Pediatrics resident and they're generally not like that.

Kristin also reflected on the unprofessional behavior of a Pediatrician who she observed passing judgment on a patient in the workroom immediately before putting on a performative, supportive act in the patient room:

> I was in the outpatient service, and this doctor I was working with… Well, first of all, when I was chart reviewing, I got like this huge flag in the comment section of the patient, it says overdue bill, going to be sent to collections. There's like thousands of dollars, and I'm like, "okay, whatever. It's not my business." It didn't phase me. So, I just went past it and prepared for a normal wellness visit. And I go in, and it's Mom and Dad, with a really pleasant baby. And I come out, and everything's normal, healthy, and I present to the attending and they cut me off "Oh, this patient? I remember them. Did it smell like weed in there?" But the tone of voice, it was not coming from a place of like, "Oh, I care about this baby." It was just like, "Oh, here we go. What's it smell like in the room?" "Oh no, she's pregnant." And I guess going back to acting… so when she goes into the room she's like, "Congratulations, I heard you're pregnant!!" And I'm like "Wow. Am I really seeing this happen?" It's interesting.

Additionally, Courtney summed up her understanding of one of my observations of her in the OR during a focus group. In my field notes, I had jotted down “power dynamics between surgeon and scrub tech,” “racist microaggression,” and “out of place” as reflections of this encounter.

Hannah

Can we unpack the scrub tech who spoke Spanish to the surgeon?

Courtney

Almost everything she said was in Spanglish.

Hannah

Can you describe what it felt like in there?

Courtney

It was a very long exploratory surgical oncology case, and I think it was like a White male team for most of it, right?

Hannah

Yeah.

Courtney

White male and then maybe towards the last two hours like there was a white scrub tech that went home and like this unique scrub tech came in. Yeah, she was wearing these like

> sunglasses. She was speaking Spanglish. She would end her statement with "Sir, Yes, sir" "Here you go, sir." And [the surgeon] never corrected that, which was very weird. And then like maybe 15-20 minutes into the procedure, she started speaking Spanish, "sí, señor."
>
> He was very dismissive of her. He asked her "Have you ever worked an oncology case?" And she said, "Yes, sir." And like he was definitely questioning her competence. And I didn't know if it was like the Spanish thing, or what. She seemed to be handing the tools right. She was a little flustered. The scrub tech that we had initially, he knew everything. He was like boom, boom, boom, boom, boom. I think she was focusing on things that weren't the surgery, and [the surgeon] was starting to get annoyed, because he was like doing a bypass and she like wouldn't have his instrument ready. It was extremely interesting to watch. Honestly, I was so distracted. I barely watched the surgery. It was interesting. She was definitely an outsider in that room. Like she didn't fit.

Courtney noticed and remembered the context similarly to my field notes: the all-White team, the scrub tech that didn't fit, and the surgeon who questioned her competence despite her handing the instruments well. She considers it could be due to her use of Spanish. However, she diverges from my notes as she sums it up as "interesting," which effectively ends her reflection. Both her and Kristin, notice the inequitable power dynamics between the physicians, their patients, and their staff, but they do not use language to appropriately name it, as such.

Conclusions

Medical education has an “interesting” problem. The word interesting is pervasive in medical school and in academic medicine more broadly, primarily used as a signal of unique or intellectually stimulating pathology (Magier & Doolittle, 2023; Fred, 1967; Peabody, 1927; Kompanje et al., 2015). However, in this study, medical students also deploy “interesting” to characterize morally fraught and oppressive dynamics they witness in their learning environments. However, the linguistic reliance upon “interesting” becomes a tool of symbolic violence as it captures, but more importantly conceals, oppressive structures, enabling their reproduction. The medical students deployed this language in the privacy of their homes, in the midst of their peers during focus groups, and on the floors or in classrooms in front of faculty and residents. This pervasive use of interesting is evidence of their understanding of its symbolic capital. They acutely understand that doctors are motivated by interesting, and medical students articulate the game that appropriately leverages interesting to secure good evaluations. Moreover, the medical students know what to say and know how to act to convey they find their preceptors’ fields as “interesting.” Their use of “interesting” early and often throughout the year is evidence of the role of “interesting” in the linguistic habitus of medical students.

Yet, there is also evidence that medical students deploy interesting in different ways than their attendings and residents, who primarily encourage their students to share they are interested or differentiate learning opportunities based on its degree of interesting. This suggests there is an incomplete nature of the linguistic habitus of medical students in this study. As medical students lobby for their position in the medical field, they bring their own histories and capital, which together present a battleground for their own legitimate vision of the field (Bourdieu, 1990,

1991). They notice the oppressive conditions around them, but they use the language of the game they are taught to play: interesting. Therefore, they are still constrained by the doxa of the field. They deployed interesting in all contexts from voice memos, to interviews, to focus groups, and case presentations, suggesting it was not fear of retribution if they were to speak truth to power. Moreover, when they were probed to describe interesting in more detail, they did not have any other language to name upstream drivers. Therefore, this study provides evidence that medical students do not have the language to name the structures that shape their learning environments. And, without language, they do not have the means to mount a meaningful critique against the structures that shape their learning environment and the health care delivered to their patients.

When medical students use interesting to characterize oppressive and morally fraught encounters, it is a form of symbolic violence. Therefore, there is a critical need to develop more language around the social and structural drivers of the tensions they witness to mitigate health inequities. Holmes (2023) draws attention to how language learned in medical school around empathy limits relationality between medical practitioners and patients. This study suggests that the language learned in medical school limits relationality between experiences of oppression with its upstream social drivers. Metzl and Hansen (2014) offer the framework of structural competency, which includes the development of an extra-clinical language of structure to address this gap. This study empirically and emphatically supports this need.

Bourdieu's concept of heterodoxy provides an important insight to understand how an extra-clinical language of structure can emerge within the field of medical education in the face of "interesting" (Grenfell, 2014). Heterodoxy depends first on the recognition of the possibility of a

competing belief system. The emergence of the competing belief system then moves from practical action to discursive exchanges. Bourdieu argues that heterodoxy is most successful when it emerges from groups rich in social and cultural capital but poor in economic capital and whose experience of life is at the midpoint between the highest and lowest reaches of society (Grenfell, 2014). Medical students fit the bill.

Social science research methods offer homologous tools for the field of medical education to develop the extra-clinical language. Therefore, an analysis of the integration of social science research methodology, like ethnography, into medical education should follow this study. Moreover, this study occurred at one site with one track of third-year medical students. Despite the depth of this study, there is a need to understand how "interesting" is deployed at other medical schools to generalize about the doxa of interesting more broadly and its role in the linguistic habitus in medical education. Selecting medical school contexts where there is a more robust emphasis on social science theory and methods is likely to provide insight into the effects of curriculum on the medical student linguistic habitus. More importantly, there is a need to understand the cultivation of extra-clinical language empowers students to address the structural conditions they find "interesting." An obvious first study would explore how dually trained physician-social science students deploy the word "interesting."

Critically, Bourdieu maintains that symbolic violence is not resolved by raising consciousness alone. He calls for "counter training" which involves repetitive actions, which is a practical course in unlearning the habitus and re-instating a new one (Burawoy, 2012). Therefore, efforts to increase extra-clinical language in medical education must also be paired with curricular

opportunities for action. Metzl and Hansen (2014) specifically call for this work in their structural competency paradigm.

Another important intervention that this work calls for is the cultivation of interdisciplinary relationships between medical students and social science students to provide opportunities to develop the extra-clinical language of structure to meaningfully critique the structures that shape medical education with the social capital of indoctrinated medical student to address them (Schlesinger et al., 2020). Together, the relationships offer the opportunity to map the implicit social relations and structures that underpin the unquestioned doxa of interesting to provide the context to disrupt the current hierarchies which structure the field. However, as Bourdieu maintains, heterodoxy is still mediated by doxa, which therefore requires a top-down approach. These interventions must also occur with faculty and curriculum developers, empowering them with the tools of qualitative research and the support required for their efforts (Shrivastava & Shrivastava, 2021).

Medical students are noticing the oppressive conditions that shape their daily lives and their ideas of the medical profession, and they are finding it "interesting." As medical educators, rather than limiting medical students to learning what we find interesting in our respective fields, let us collectively respond to Dr. Fred's (1963) call and begin developing the tools to explore what they find so interesting. And maybe then, we will come closer to our aims to train a medical profession that both acknowledges and addresses the social and structural drivers of health.

Footnotes

[1]UWorld is the comprehensive test bank used by more than 90% of U.S. Medical students to prepare for the licensing exams, including the USMLE Step 1 and USMLE Step 2. (UWorld, n.d.)

Chapter 2

“Don’t Rock the Boat:”

From Professional Identity Formation to Social Reproduction in Medical Education

Introduction

The United States notoriously faces measured health disparities across race, gender, income, education, employment, insurance, among other factors (Adler et al., 2016; Marmot, 2005). Only at the turn of the twenty-first century, the field of medicine put forward an outward professional commitment to social justice in their Charter on Medical Professionalism (ABIM Foundation, 2005). Since then, the role of the physician in addressing health inequity has been hotly debated (Huddle, 2011; Kuo et al., 2011). On one end of the spectrum, Huddle (2011) argues that advocacy is inherently political, undermining the profession's aspirations of objectivity and neutrality and displacing "real medical work" (Huddle, 2011). Evident of the opposition to Huddle's (2011) viewpoint, eight letters to the editor were published in Academic Medicine in response to his article, comprising viewpoints from medical students, residents, fellows, attendings, lawyers, and medical education researchers arguing that advocacy belongs within medical education and professional responsibility (Kuo et al., 2011). Nevertheless, the principle of social justice has been codified into medical education by the most updated 2022 Liaison Committee on Medical Education (LCME) standards, used for medical school accreditation in the United States and Canada, which mandate that the medical school curriculum include content that enables students to recognize and address bias in self, others, and in the health delivery process (LCME, 2022).

The curriculum around this standard in medical education has moved from cultural competency to cultural humility and most recently to structural competency (Metzl and Hansen, 2014). Within medical education, advocacy curricula have been implemented haphazardly, and social determinants of health are generally taught as checkboxes rather than meaningfully integrated

into care (Sharma et al., 2018). There is also evidence that these interventions have not translated to a workforce prepared to address the social determinants in practice (Neff et al., 2020). Some studies have even shown that medical school leads to acquiring more negative attitudes to the poor, as they learn within a system that values checkboxes and objectivity over ambiguity (Crandall et al., 2009; Wayne et al., 2011). In turn, there are renewed arguments for more social science and humanities in medical education, critical pedagogy, and community-engaged learning to address the LCME aims and fulfill the professional commitment to social justice (White & Greene, 2024; Cabey et al., 2024; Onuoha et al., 2024). Therefore, there is a critical need to explore how medical students take up the LCME standard "to recognize and address bias in self, others, and in the health delivery process" into their professional identity.

From Professional Identity Formation

To enter into a profession is to take on a new identity, and literature around professional identity formation (PIF) has taken off in medical education, with more than 10,000 articles identified in a scoping review since 2000 (Sarraf-Yazdi et al., 2021). PIF is defined as "the complex, multidimensional, ongoing, and transformative process through which individuals negotiate between or merge their preexisting knowledge, skills, values, and behaviors with those they perceive as embedded in their chosen career" (Mount et al., 2022, p. S96). PIF includes the negotiation of internal factors, such as students' values, attributes, and personal circumstances, and external factors, including the curriculum, learning environment, and external expectations (Findyartini et al., 2022). Moreover, some studies have conceptualized PIF as linear, others as convoluted, and even some as painful (Sawatsky et al., 2023). Studying PIF is of critical

importance as the professional self reflects the values and virtues of medicine, which provide the stability and generalizability of the profession (Hafferty, 2006).

Medical school and residency training cultivate the professional self through socialization, the learning of the rules of the game: a process of accumulation of the profession's values, norms, and practices. From Becker et al. (1961) to Merton et al. (1957) to Fox (1957) and Hafferty (1991) to Friedson (1970), the sociologists of medical education have thoroughly attended to social factors and contexts that drive professional identity. Within the canon, there are descriptions of the accumulation of knowledge, theorizations of the collective responses that emerge in medical education, synthesis of the grappling with uncertainty that occurs during training, and analysis of how the state afforded medicine the autonomy to control the definition of the problems it addresses and the way its work is performed. Mechanistically, Haas and Shafir's (1982) contribution of the hidden curriculum, the unwritten rules outside of the formal curriculum of medical education, is one of the most useful concepts that have been used to explore physician professional identity formation.

Since the hallmark studies of the twentieth century, academic medicine has widely adopted competency-based medical education, which turns its focus to learners' abilities to demonstrate competencies required for safe and independent practice (Sternszus et al., 2023). Competency-based medical education (CBME) is "an outcomes-based approach to the design, implementation, assessment and evaluation of medical education programs, using an organizing framework of competencies" (Frank et al., 2010, p. 641). Within this predominantly positivistic framework, competencies are operationalized into observable behaviors. In the ACGME

Milestones, the organizing core competencies of medical education include: Patient Care and Procedural Skills, Medical Knowledge, Practice-based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, and Systems-based Practice. Notably, professionalism exists as a competency (Eno et al., 2020). The professionalism competency is further broken up into observable subcompetencies: Demonstrating Professional Conduct and Accountability, Demonstrating Humanism and Cultural Proficiency, Maintaining Emotional, Physical, and Mental Health, and Pursuing Continual Personal and Professional Growth (NEJM, 2020). Advocacy falls under the first two subcompetencies. These competencies have since become the framework on which learning objectives and curricular activities rest.

Therefore, within this paradigm, along with clinical skills and knowledge, professionalism also became something to measure. Congruent with CBME principles, in a systematic review, authors characterize the PIF literature as interventional rather than exploratory, mostly attending to the outcomes of reflective writing and narrative reflections (Sarikhani et al., 2022). The authors highlight the paucity of literature around understanding PIF as a socialization process. In the studies that do attend to socialization, the hidden curriculum remains a primary site for understanding professional identity formation today. Since Haas and Shafir (1982), scholars have characterized the components of the hidden curriculum, identifying the rules, structures, and culture as the most influential components (Bearman et al., 2021). Yet, Bearman et al. (2021) reveal that medical education largely invokes culture as acontextual or all-powerful, leaving a gap in understanding that allows agency and acknowledges the forces that social settings exert.

Moreover, Hafferty (2006) warns a focus on behavior may neglect our pedagogical responsibility to assess and transform the learning environments that students must navigate. He argues that we should begin by assessing learning environments because, “it makes little sense to assess the professionalism of students within learning environments that are hostile to its precepts” (p. 2152). Moreover, some authors identify a tension between PIF and CBME, arguing that by focusing on what learners are doing, we may unintentionally overlook who learners are becoming (Sternszus et al., 2023). Sternszus et al. (2023) identify incongruities within medical education: CBME is behaviorist and collective whereas PIF is constructivist and individualistic. Together, this requires a reframing and expansion of how medical education scholars conceptualize and study professional identity formation in its learners.

To Social Reproduction

There is a consistent theme within the medical education literature: “reform without change” (Bloom, 1988). Yet, there is a dearth of current analyses of social reproduction within modern medical education. Previously, scholars have evoked Bourdieu in their analysis of medical student socialization to explore how individuals and institutions interact, specifically through the medical student habitus (Brosnan, 2009, 2014). Habitus is “the feel for the game,” which is a two-fold process: learning which forms of capital are valued and developing strategies to acquire the capital to be deemed as competent (Brosnan, 2014). Unsurprisingly, through the study of the medical student habitus, there is evidence that the institutional ethos is also reproduced through the dispositions of medical students (Bland et al., 1995; Maheux et al., 1989; Roath et al., 1977). Therefore, using the medical student habitus as an analytical tool provides insight into the

medical school's institutional and organizational that has largely remained stable since the 1950s (Bloom, 1988).

While scholars have employed Bourdieu's (1990, 1991) concepts of habitus and field to theorize medical student socialization, there are no empirical socialization studies that explore how medical education shapes the way medical students come to understand their professional role in social justice (Brosnan, 2009, 2014). Exploring the structural forces of medical education that shape daily interactions in the medical school learning environment is critical in elucidating how the physician professional identity is shaped around the social determinants of health. In this paper, I move from professional identity formation to social reproduction to provide a new analytical perspective to expose the underlying logic in biomedical education that shapes professional identity: one that is constructivist and collective. In turn, exploring the medical student habitus to understand how students negotiate their professional role in social justice addresses a critical gap in the medical education literature. With this lens, this project describes the underlying logic of medical education which prevents the medical profession’s commitments to social justice and advocacy from aligning with medical student professional identity formation.

Methods

The data come from field notes and recordings from an ethnography of third-year medical students during the 2022-2023 academic year. In the traditional model of medical education, the third year of medical school is the first year of clinical experience. Typically, students move from specialty to specialty, embedded in both inpatient and outpatient teams, learning the work

of their profession (Beck, 2004). This is opposed to learning the knowledge of their profession, which is the primary focus of the first two years of "preclinical" education. As the medical students embody the work of the profession for the first time, there is evidence that the clinical year of medical training is the most significant period of socialization for trainees (Han et al., 2015; Becker et al., 1962). Therefore, the clinical learning environment was selected for this study.

This study took place at an accredited medical university in the Northeastern United States that adhered to the traditional medical education curriculum: two years of preclinical, basic science work and two years of clinical work. The social determinants of health curricula at the medical school predominantly occurred in the preclinical years through a longitudinal case study course, which is reflective of national trends (Lewis et al., 2020). During the third year, medical students moved through "clerkships" in Internal Medicine, Surgery, Family Medicine, Neurology, Psychiatry, OB/GYN, Pediatrics, Emergency Medicine, and an elective block. Internal Medicine is ten weeks, Surgery is seven weeks, Family Medicine, Neurology, Psychiatry, OB/GYN, Pediatrics, and the elective blocks are five weeks, and Emergency Medicine is three weeks. The traditional curricular scaffolding made this site suitable for increased generalizability.

After selecting one group of medical students that would move through the year together, I began this ethnography with hour-long semi-structured interviews on Zoom, loosely based on life story methodology (Russell, 2022). In these interviews, I sought to understand the students' journeys to medical school and how they were making sense of their professional identity. I also asked questions about the role of social justice within their developing physician professional identity.

During the clerkships, I joined the track for orientations, specialty-specific lectures, standardized patient experiences, and observed patient encounters embedded within the students' primary responsibilities of their clinical service. As a participant observer, I observed each medical student once per clerkship. I intentionally varied the setting that I observed each student from clerkship to clerkship, observing them all in outpatient, inpatient, and surgical settings. To further protect faculty and student identities, I intentionally changed clerkship specialty context as to prevent identification. At times, I also changed language, attribution, and/or setting of quotes to decrease specificity of encounter.

In total, I completed more than 500 hours of participant observation over the academic year. I took notes during observations on my clipboard, identical to the ones that the third-year medical students used to organize patients' vital signs, labs, and consultant suggestions as they prepared to present on rounds. I wrote down as many direct quotes as possible, attended to body language, and marked the things unsaid. Demographics were observed rather than collected. All names were converted to pseudonyms with personal identifiers altered to maintain anonymity of participants. To ensure my accuracy, I would often ask clarifying questions to students, residents, and attendings, as we moved between patient rooms. Students also texted me or sent voice memos later in the day about their experiences, which were included in fieldnotes. I aimed to transcribe detailed field notes of the interactions that occurred during my observations within 24 hours.

After every clerkship, I held two hour-long focus groups with 4-5 medical students. The composition of students varied each clerkship to increase interactions among the group. We

began each focus group with the students identifying and exploring encounters that stood out to them from the clerkship. They would also comment on how each specialty addressed the social determinants of health. I often asked probing questions, and over the course of the year, the medical students began asking probing questions of their classmates. Overall, through participant observation, interviews, and focus groups, I sought to understand how medical students learned to make sense of their professional role in acting on the social determinants of health in the clinical learning environment. The project was approved by both the medical university and Syracuse University's Institutional Review Boards.

I used Atlas.ti to analyze the fieldnotes and focus group and interview transcripts and code the text for themes (ATLAS, 2022). For this study, in alignment with the LCME (2022) standards, I selectively compiled excerpts of field notes and interview and focus group transcripts that were associated with medical students identifying and addressing bias in themselves, others, and in the health delivery process. I then re-coded these excerpts for themes. I approached this analysis inductively and deductively.

Fractured Habitus

As a dual medical student and social science graduate student, who completed my medical training at the same medical school as this study, I approached this project with what some call a fractured habitus and others deem a complicity consciousness (Schlesinger et al., 2021; Sufrin, 2022): aware of the suffering around me while also participating in it. However, Sufrin (2022) argues that a complicity consciousness maintains an ethic of critique on the messiness of participating in systems that cause harm. She argues that clinical ethnography by clinician-

ethnographers has the potential to lead us to short-term treatment of suffering and long-term abolition of the systems that enable the suffering. The methodology of this project rests on this shared belief.

Seim's (2021) hybrid ethnography is a suitable methodology for this fractured habitus, as I fluidly transition between participant-observer and observant-participant in this study and in my studies. Over the year, I held a woman's leg during a contraction as she delivered her first child, I played in co-ed soccer games with attendings and students, I offered answers on rounds, I shared my clinical understanding to caregivers of children with mental illness, and I pushed back when biological racism was conveyed in teaching points. At other times, I remained in the periphery watching medical students move closer to the attendings as they presented, noticing how medical students fell back in line to let the attending walk into and exit the room first, or observed how the attending only looked at the residents while the medical students presented. I also deployed my professional identities differently during the project exploring how access was granted according to my qualifications; noting in some settings, I had to minimize my research interests to "keep the door open" (Reyes, 2018).

As someone with both the medical student habitus and the social science student habitus, I maintained an effortful commitment to reflexivity. Throughout my observations and in my fieldnotes, I noted how my dual-training influenced the conversations occurring with the medical students and with others, my perceptions of the medical students' behaviors, and my attention to some details over others. Importantly, I examined that my ease of access, social position as a MD/PhD student who completed clinical training requirements in a hierarchical learning

environment, social position as a white woman, and subjectivity of attending medical school at the site I studied shaped the data that I gathered (Stuart, 2018). My system of fieldnotes separated my feelings and experiences in the field parenthetically from my observations. I also maintained a practice of writing analytical memos around emerging themes in the field and how they did or did not fit within the literature.

Results

"Don't Rock the Boat"

From the first clerkship, it was clear that the students had cultivated a stance and behaviors to fit into their learning environment. Medical students' fear of hypothetical reprisal was palpable and communicated from the first focus group. The students were seemingly paralyzed by the fear of the retaliation of speaking up against behavior they deemed inappropriate or problematic. Speaking to the hierarchical nature of medical education and the reliance on superiors for career advancement, the students specifically named the consequences on their prospects of their future career if they were to critique authority.

Early in the clerkship year, Samuel, Corey, Rebecca, and Courtney discuss the unique parameters of the family medicine learning environment, in which they are paired with one preceptor, which further limited their comfort with speaking up. Samuel, a white male student, noted by his colleagues to be the most positive of the group, shared:

> As a student, it kind of feels like you don't want to rock the boat. You want to get in and get out with a good eval. Do well on your step score, shelf exams. I felt like it wasn't

worth it to bring up any issues with the learning environment. Let it be and move on to the next patients.

Courtney, a white female medical student, committed to a OB/Gyn career, agreed with Samuel and explicitly names “the risk of retaliation:”

> I think family medicine is kind of difficult to report on the learning environment because you are one-on-one with a preceptor for five weeks and if they get poor feedback after five weeks of being with a particular student, that student is blacklisted. Let's say Rebecca’s doctor happens to know like residency programs, or family med here knows that Rebecca trash talks. What's preventing him from calling that doctor and saying this student is a problem child, don't take her? There's that fear of the risk of retaliation.

Even Corey, a notoriously laid-back white male student, describes the threat of the evaluation:

> You know, it's our first rotation, we don't want to step on any toes. And like Courtney was saying before, there's always this kind of like eval hanging over your head. So you don't want to make any waves or give (the preceptor) any reason to call back and be like, hey, so and so is a problem student.

Together, these students have learned the importance of complicity and passivity as critical to their success in medical school, effectively internalizing it as part of their medical student habitus. This stance is antithetical to addressing bias in their learning environment, which requires one to push against the status quo.

Later, Rebecca, a white female student, even describes the impulse to want to report behavior but resigns to erasing it due to the relationships she needs to maintain to secure a residency position:

I typed in [my preceptor's unprofessional behavior] into the evaluations at least three times and erased it and decided not to do it because he's so involved with the medical school. I think it would open up a door I don't want to get into because I want to go into the field.

Rebecca was not the only student who shared that she described problematic behavior in her evaluation only to erase it. Courtney, Samuel, and Corey all disclosed similar self-censoring strategies during the OB/GYN focus group. Courtney even identifies the regret she feels after self-censoring:

> There was a single resident that I had an experience with, and she just was disrespectful towards patients and apathetic towards med students. I think I told you this, Hannah, but she very much had an issue with obese patients to the point where I think that she gave a different level of care to them. She would comment on smells or doing pelvic exams. We left the room one day to go do the fern paths. And she was like, "I can't believe somebody stuck something in there." Like really just a horrible statement. I was like, "Why are you doctor? How are you a doctor?" I didn't say anything to her because I was kind of shell-shocked when she said it. But last night, I was actually filling out her evaluation. I had everything written up. I was like "really needs to check herself in terms of how she treats patients," and then I literally stared at the evaluation for 30 minutes. I was like, "This is gonna come back and bite me." I selected "insufficient contact to evaluate," which now I'm regretting.

Samuel provided an alternate strategy to Courtney's, but maintained his anonymity:

> I wrote about her in the general feedback on OB/GYN without listing names. It was like "there was a resident that was saying that RNs don't know anything about how to deliver

> a child, and if they were NPs, they would know, or if they were MDs, they would know."
>
> I think it's the same person. She was really mean about other providers.

Rebecca brought up another time she was compelled to write a poor evaluation but did not:

> I had a bad time with two residents. I didn't want to do any evaluation for her because like the course director's little pet. Of all the residents I worked with, she did the bare minimum of saying hello and then telling me to go see things. She didn't teach, and her only feedback that she ever gave me was like, "Oh, you didn't help enough after this delivery. And you could be cutting the sutures."

Therefore, these students are identifying the problematic features and behaviors in their learning environments, but they are not empowered to meaningfully address them. The formal curricular means of evaluations for reporting problematic behaviors is not anonymous enough to be deemed safe by the students.

Later in the focus group, Corey agreed that the course director and resident dynamic problematized their outlets for reporting a poor learning environment.

> I definitely agree with that dynamic. The course director was always talking about "if there ever is a problem, you could come to me." I'm like, "I really feel like I can't come to you with this, because during orientation they acted like they were really great friends." So I feel like I can't come to you and be like, "I think your friend is being really rude to me." I think at the end of the day, he would side with her.

Elizabeth, a high-achieving, white female student, and Corey further expound upon the risk of a poor assessment preventing them from "rocking the boat." Despite having outlets for reporting,

they speak to the imbalance of power between them and their assessors that silences them, effectively enabling reproduction of the power imbalance and inappropriate behaviors.

Elizabeth

> …where do we go (when we have a grievance)? Do we go to the clerkship director, or do we go to the residents themselves when they are writing our evaluations and they're responsible for if we get high pass, honors, or just pass? I don't feel comfortable rocking the boat when I know that my grade is in their hands partially. It's just when someone has that kind of power over you in terms of grades, and grades are important for residency, like it's just who's going to like rock the boat? Who's going to say, "Dr. Weston, you should not be talking to me that way." It's just too risky.

Corey

> I know that they have policies and writing put out what is acceptable and unacceptable behavior, but when I read that stuff it all seems very vague. I feel like if I ever had to confirm something or explain [unprofessional behavior], this could be twisted to be "you were unprofessional, you failed" or whatever. Like I feel like they always have this "Get Out of Jail Free" card for anything they would get cornered with. I'm gonna keep my head down and try to survive.

Therefore, the other formal resources offered to the students during their clerkship orientations for bringing up concerns about their learning environment and patient care, namely, clerkship directors and residents, are also hollow for the medical students.

Moreover, the students are even able to describe the imbalance of power that prevents them from taking critiques or reports of inappropriate behavior to their superiors. During a focus group in the middle of the year, Courtney shared feedback she got from the Bioethics course, in which the preceptor noted she was part of an "exceptionally quiet group." This matched my field notes from their classes, which were demarcated with long pauses that the preceptor often filled. I asked to explore the lack of participation with them. Josh, a white male working towards an surgical residency program, offered a point about preceptor power which silenced him:

> Josh
>
> …(the facilitator) scares me a little bit. She's the bioethics lady. I can't say the wrong thing.
>
> Courtney took this further:
>
> I think in this setting, it's very easy to commit professional suicide if you're open about political views.
>
> I pushed back on her point:
>
> Have you seen that? Do you have evidence of that?
>
> Courtney
>
> I don't. I don't but I just feel like…
>
> Josh
>
> That sounds intense: professional suicide.

Courtney

I think that if your opinion differs from the people in power, you have zero chance of moving up. If you agree with the hierarchy, yeah, go for whatever, it'll help you. But if you disagree, stay quiet.

Josh

And also higher ed institutions tend to have the single narrative, typically more liberal stuff. So it might be tougher to disagree with that.

Kristin, a white female medical student, shared:

I feel like the common theme is when there's like someone when there's a power dynamic, it's uncomfortable to show any sort of disagreement, whether that's political or whether that is about if you think that they're being unethical. Unfortunately, when someone has control over you, whether it's with your grades or whether it's a possible promotion, it's hard to rock the boat when somebody is more powerful than you in some capacity and they are very obvious or outspoken with their beliefs.

I actually do have a personal example. This goes way back to first year in college. In my history class, we were asked to write about a topic, and I don't even remember the topic, but I was playing the devil's advocate for my position on a stance. I'm not saying I'm a brainiac, but I'm also not like a poor student, and I did so poorly on his paper. So, then the next paper that we had, I didn't go against the grain for that one. My professor

> specifically said, “You've grown so much” and he gave me a 100. So, if I go against the grain, I get a poor score. And I didn't suddenly increase my ability to write well. I probably did better on the first one, because it took so much time. It was graceful and eloquent, and I made sure that I had my ducks in a row as I was bringing attention to these points. I probably wrote a better paper the first time around, but I barely passed it. And so, I learned to just not to rock the boat, which is sad. It’s a sad feeling because should we talk about politics? And I think yeah, absolutely. I think politics are important and I think they do have all of these ramifications in life… When you're talking about these things that people do like really heavily associated with personally, it's tough because when you say something that they disagree with, it's almost interpreted as like an attack on themselves.

In this exchange, the students articulate the power dynamics that shape their willingness to participate in conversations that elicit a political nature in their Bioethics course, which is the formal curricular space that most directly explored social phenomena during their third year. They also attribute the cost of speaking against power as an extreme: professional suicide. And they hold this view, even without evidence of it happening. Therefore, the mere potential for retaliation disempowers them from sharing and ultimately addressing their concerns. Of interest, the students directly name the setting of medical education and higher education as antithetical to sharing differing views, implicating their awareness of how the field of medical education shapes their developing professional identity. Kristin even attributes the “don’t rock the boat” mentality to her undergraduate work.

The students also create boundaries of when it’s worth it to speak up or not. Samuel shares he will speak up if something is “really egregious and unethical.” He then explains the gray area around academic integrity and how although some things are unethical, they become part of the game of navigating medical school. He resigns himself, “I guess I have to play.” Josh also speaks to the hypothetical gray area of future colleagues exaggerating time spent with patients in their billing: “What are you going to do? Call them out, or are you just going to put an hour for you too?” Unprompted, Samuel interrupts and clarifies himself:

> I guess with these things [that I don’t speak up about], I don't feel like I'm hurting anyone. Well, someone is getting hurt, but I guess it's really removed. I would hope if it was so egregious and clear that a patient or a colleague was getting consequences then I would say something.

Therefore, proximity to injury also plays a role in speaking up: the closer to the injury the more likely Samuel would address the issue.

Elizabeth also articulates a boundary between speaking up or not during an evening Bioethics session on zoom:

> I feel like one thing I've learned throughout the years, there's battles that I'm willing to fight and battles that I’m not willing to fight. For example, I'm in surgery right now and there's one surgeon who a lot of people just do not like working with because they are very mean in surgery for no reason. It's usually when they get really flustered or when they're really anxious. And I know that nothing I say to this person will be taken well. Nothing productive is gonna come out of it. That's not a battle I'm gonna fight. I want to go into surgery, so I don't want to step on any toes. But I also know that that's a losing

battle no matter what way I go about it. I'm more apt to speak up on things with people I feel like will actually do something about it than challenge people who I know are just going to be resistant to it in a very negative way for me and those around me. Because sometimes depending on what the situation is you can almost make it worse. But overall, I feel like the assignment made it easier for me to talk to those people that I feel like would receive it well.

Again, she names the relationships required to advance into her career, but also shares that she will only invest when she perceives change will occur, effectively enabling inappropriate behavior to continue. Therefore, an education around social determinants that leans towards checkboxes rather than imagining and contributing to transformational change also prevents medical students from addressing the issues they face in their learning environments (Sharma et al. 2018, Metzl and Hansen 2014).

To cumulatively reflect on these findings, I explored the theme "don't rock the boat" with the students in the last focus group:

Hannah

Can we talk about when something came up that didn't feel good to you? What would it have taken for you to have said something in that moment?

Kristin

Personally, I just feel like it always comes down to the same thing when someone's writing an evaluation of you. I just don't want to ruffle feathers. Like it's just it's really sad.

Courtney

I wish my response were different, but it's not. It boils down to this is my grade. This is what determines my clerkship grade. Okay, maybe next year (I'd speak up), if I did a post-match rotation and saw something ratchet.

Therefore, there is an understanding that the risk of speaking up is too high to be tenable that governs the medical student habitus. Only when the power dynamic is alleviated, i.e., post-match day, would speaking up be safe. Therefore, without addressing the hierarchical learning environment and the tremendous power that lies in the hands of evaluators of medical students, speaking truth to power is a nonstarter. However, despite maintaining their passivity, the students associate a sadness to their inability to speak up, and they wish it were different. This provides evidence of a developing physician habitus that remains incompletely formed at this point in training.

Beyond the learning environment and broader culture of medical education, professional identity formation literature also implicates personal characteristics (Findyartini et al. 2022). To explore that dimension with students in this study, I asked the students to assess themselves more globally:

Hannah

Would you guys consider yourselves as rock the boat people or not rock the boat people?

Josh

I think I used to be more.

Courtney

Not rock.

Kristin

I think it depends on the circumstance and the environment, but not in a setting with people having power over me.

Therefore, there is evidence that medical students come in with a stance of passivity but the power imbalances and resulting precarity in medical school further entrenches it. I dove deeper. “Are you ever going to be in a spot or a position where people don't have power over you?” Kristin goes so far to say that she can’t feasibly think of a time when she would be able to speak up given the hierarchical nature of the medical profession:

> I guess it's true. That's the problem. I was gonna say when I'm attending but then there's still always a superior attending. You're never gonna get a promotion if you rock the boat. And so there's always going to be someone, unless you're the CEO of a hospital or something. There's always going to be that power dynamic, which is why it's just not, in my mind, feasible to rock the boat. I don't know when it would feasibly ever happen.

Samuel responds, and again, echoes his response about proximity from earlier in the year:

> I think that if it's bad enough I would. I guess I haven't, I mean, fortunately, seen anything so egregious. I've seen bad things. I was not present but I was really close to that interaction with the ob/gyn resident that called someone out on being obese. Courtney, you shared with me and I was not okay. It's definitely not okay. But for me, I would say I’m kind of a roll person, because you have to be. You have to know how to game the

system if you want to get into med school and then you just continue to do so as you go through.

Kristin

My brain is turning… does med school look for people who don't rock the boat? I think so. I dabbled in interviewing medical students a little bit... With the candidates that I interviewed, it was so obvious to me that it was a scripted response. But (the admissions department) gave me a checklist, and it says "did the candidate talk about XYZ?" and I would check yes. And so.. they are going to get accepted based on what was not genuine at all. But, I can't lie if they did physically talk about it… So you've learned to play the game and you are learning what you have to do… it's really sad. I don't think that med school is looking for people who aren't rocking the boat. I think that it's just certain things that are known that they are looking for. So people will like mold themselves to superficially fit this thing and it might not be real and representative. And then, "here you are, you're accepted."

Here, Kristin and Samuel frame their tenure through medical school as a game, and even implicate the role that admissions plays in cultivating a population of students that "don't rock the boat." They associate playing the game with the success of their future careers, and they are unwilling to disrupt the status quo as to not jeopardize it. The game is how medical students "mold themselves" to the profession they enter: a direct nod to social reproduction and the inculcation of the medical student habitus. Together, these findings suggest that the students in this study have evaluated the costs of "rocking the boat" as too high to be feasible, evincing that power dynamics and precarity rather than deficient curricular strategies underly the failure of

uptake of social determinants of health efforts in medical education: a topic that inherently requires disruption of the status quo.

Speaking Up

Despite an overwhelming commitment to passivity and complicity, there were a few instances throughout the year when students spoke up as they witnessed inappropriate behavior. These instances are important to analyze to better understand when and how medical students deploy their role in addressing bias in themselves, others, and the health delivery process. The most explicit moment was a curricular effort to encourage speaking up through an assignment embedded within their bioethics course. It required the medical students to identify a problematic encounter, speak up about it to superiors, and then submit a reflection on the experience. During a bioethics session, the preceptor, Dr. Williams, asked the students to share their experiences of speaking up. The students named barriers including lack of confidence and lack of power that constrained their ability to speak up.

> Elizabeth
>
> It was difficult to speak up because this occurred on one of my first rotations I was on. I was brand new to the hospital team setting, and I didn't know how feedback from someone with nearly no status would be received.
>
> Samuel
>
> I think as a student and as a future provider, it’s probably helpful to go through the exercise of internally acknowledging something and calling it out. Because otherwise, we see some providers just get into a routine and they wouldn't think to question things. But I

> feel like it's been useful questioning things even if the outcome isn't what we'd hoped for, at least for ourselves so we don't become jaded.

Here, Samuel speaks directly to social reproduction that occurs as providers get into a routine and stop questioning things. He also provides the importance of this exercise: avoiding becoming jaded. This echoes Bourdieu's call for counter-training, which involves repetitive actions to unlearn the habitus and re-instate a new one (Burawoy, 2012). Moreover, Rebecca, Corey, and Kristin remarked that this exercise made it easier to speak up in the future:

> Rebecca
>
> I think it would be easier to do it again. I don't know if that's just because we're farther in the year, and I'm much more confident as a medical student now than I have been before or if it was this assignment or maybe both of those together. They probably both played a part in feeling like I was able to speak up.
>
> Corey
>
> I think doing it the first time is probably going to be the hardest time because we've never seen the outcome of it, but I think having done it once, it should be easier moving forward to do it again.
>
> Kristin
>
> I was actually going to say a pretty similar theme. I had a really positive response when I spoke up and so I think that gave me the confidence and it encourages me to speak up in the future. But I am curious if people had really negative responses to speaking up or saw that reflected in their grade that might deter them from speaking up in the future.

Therefore, practicing this behavior through a curricular assignment subjectively improved their confidence to speak up against inappropriate behaviors. However, there is a still a skepticism around safety, even within the parameters of this school-sanctioned assignment. Therefore, the broader context of training remains inadequately addressed in this assignment.

On the other hand, Josh starkly disagreed with his colleagues, arguing that the assigned nature made the exercise of speaking up artificial. As the assignment felt more of a crutch than a skill-building exercise to Josh, he highlights that this one-off experience does not to address their precarity as students:

> I actually disagree with that. I feel like the first time is going to be easier because in the back of my mind when I spoke up if I got any backlash I'd be like, “Well, I had to do this for school.” And I would have backtracked or something. I feel like I had a little bit of ammo. But now in the future, it actually just has got to come from me. And although the first time it did go well, and it kind of serves as a confidence boost. I think the effort is still going to be great and it's not going to get easier to speak up.

Finally, Courtney and Elizabeth, both going into surgical careers, shared their doubts about this exercise:

> Courtney
>
> It was certainly a challenge to speak up. I think I would like to say that it's something that I'll do in the future. I think it will be a whole lot easier when I'm not a student and grades aren't on the line. But even now, I was just earlier filling out like evaluations, and I've had some pretty like poor experiences with some attendings, and I've never given an attending below a perfect rating because I'm just afraid of retaliation, which is ridiculous.

> Elizabeth
>
> I'm gonna say this experience was conflicting because I know that I should but I always come up with a million reasons not to in the moment.

Therefore, a one-time assignment to speak up was not enough to meaningfully confront their fears about retaliation which prevents them from speaking truth to power, which is also in alignment with Bourdieu's call for counter-training and its emphasis on repetitive actions (Burawoy, 2012).

To address the students concerns about retaliation, Dr. Williams, "the bioethics lady" that Josh spoke about earlier, commented on the evidence of retaliation that the students alluded to:

> To my knowledge, we've never had it show up in student evaluations. Although, I don't know if that is just luck because not everyone evaluates you and the person you're speaking up to isn't always the one doing it. But I think we realize when a student speaks up, we know that something is wrong…I think where there has been a negative response, it's almost like the person wants to forget that it ever happened or that a student shed light on their failures or their inadequacies in some way.

Even as an attending, she is not sure whether the fact there has never been an instance of retaliation against students for speaking up is a result of luck, which further stokes the students' fears of retaliation and suggests it remains part of the physician habitus.

In another example of speaking up, during a mid-clerkship feedback session, Katherine, a White female student who joined this track for three clerkships during the Fall semester, critiqued the quality of standardized patient encounters (SPEs):

> Katherine
>
> I wanted to ask about the elements of the SPE that are based on the standardized patient's acting abilities… there are some things that to me seem like they fall to the acting ability of the SPE versus the things that they state to you like mood, worry, stress, sleep. I'm sure this is something that happens frequently in his clerkship. I was wondering if we could just talk a little bit about how we handle that.

Dr. Preston, also a White woman and a faculty leader for the clerkship, clarified, "So are you asking how the SPEs are trained? I'm not really sure what you want us to talk about." Katherine responded more directly this time:

> It's all subjective. I felt like my SP did not demonstrate weakness. I thought they had great strength with me, but that's a checkpoint that you're looking for in the write up. I still reached the diagnosis… but I missed a checkpoint there. So, I think that so much of what we're looking at is subjective and based on just how the actors are portraying the symptoms that they're being told about. What's the best way for us to demonstrate what we know and show you that these are things that we're looking for, even if maybe the SPE isn't over-acting it or fully showing it?

The clerkship director acknowledged the "trickiness" of this situation. And explained that there were ways to make up for points based on the difference of how actors act. She said that her question would be better directed to the standardized patient center, who would address it if there was a trend suggesting the actors are not acting the case appropriately. She argued that most of

the case was objective, and part of medicine is getting comfortable with the subjective. Katherine retorted, “I’m concerned that I am not able to demonstrate my abilities for assessing the subjective when they are not portraying it as the case is written.”

The next thing she said stood out with me for the rest of the year: “I really do encourage my classmates to speak up if you feel like this. Maybe I'm speaking to an outlier experience.” There was silence. No other student spoke up, even though the complaints about the problems with SPE evaluation were one of the biggest themes of the year. Dr. Preston filled the silence and again reduced Katherine’s point, arguing that this was an issue about a half of a point on an entire clerkship grade. She also identified this problem of ambiguity as one of the pieces of professional growth required within the course. Finally, she lumped this concern into “global changes,” which she identified were outside of the scope of this specific clerkship. There was more silence here. Dr. Preston asked for suggestions for better solutions, noting it’s a ceaseless concern of students. Again, no one spoke up until Katherine shared that she would be happy to talk about what she had learned through “med ed literature review,” which she does on her “own time.” However, she cut herself off, maintaining, “I do not want to take up any more of my classmates’ time.”

In this case, both Katherine and Dr. Preston called out to the students to participate in the conversation: first, Katherine asked for the support of shared experience, and later, Dr. Preston asked for suggestions. Yet, the students at both invocations remained silent. When Katherine speaks up against the bias she perceives in the grading of standardized patient experiences, she is also acutely aware of the time she is taking up from her classmates. She steps down when there

is no support from her colleagues. The lack of collegial support evinces the entrenched culture of individualism within medical education, which prevents Katherine's critique from further developing into action (Rios 2016). The lack of engagement at Dr. Preston's request demonstrates the responsibility for addressing bias in one's learning environment is outside of the medical student habitus within this cohort.

At the end of the clerkship, we reflected on this exchange in both focus groups:

> Hannah
>
> Katherine invited you all to participate: "if other people are experiencing this, I'd love to hear it." What prevented you in that moment from speaking up when the SPEs not being standardized is a constant issue for you all?

Maya, a Southeast Asian female medical student, spoke up first, again delineating between when it was safe to speak up and when it was not:

> In that moment, I didn't have a specific example to support her well enough to make her voice heard more. I felt like if I were just to agree with her, it wouldn't have even added weight to hers. And I didn't even have my formative information at that point, because they didn't get it back to me. They didn't have my video or my checklist online. So I had nothing. What about you guys?

Samuel also relinquished his voice, "I literally got I think like a 52. I felt kind of removed. Something didn't go well, and it's not just that SPE. I'll take some of that [blame] too." Therefore, Maya and Samuel believed that did not have enough experience to have a valid opinion in the space to support their colleague, despite their concerns about the grading process

that emerged much earlier in the year. In turn, they allow their colleague to stand alone and the learning environment to be reproduced.

Later, Kristin shared a longer reflection about this interaction:

> Okay, so my frustration was I had noticed that this standardized patient had fair strength. I didn't get the point because the point was supposed to be poor strength. So similarly to Katherine’s frustration I looked for strength, and I mentioned strength. So I should have, you know, gotten points. It's not my fault that the standardized patient did not give me poor strength and gave me fair strength. That was my frustration, but I didn't say anything because I just I guess I was like, “Okay, well, so this is a standardized patient, they're basically telling us strength is going to be poor.” Like, like, it's almost like you get into the “Okay, how do I perform? How do I score well on this?” is not based on how I actually assess like the eye contact or whether I am documenting that clearly and accurately. How I score well, is by knowing what they want to see, what you would see. I'll just give them what they want next time. And I'm gonna say strength is poor even if the guy ia kicking his leg as hard as he can, I'm gonna say poor strength. I didn't think it was necessary because I feel like we kind of talked about this earlier before you came in, Hannah, but it's almost like so much of med school is just like a game. Okay, you want poor strength? Now I know. And now I can say that there's poor strength, even if there truly isn't. And is that a great way of assessing a standardized patient? Absolutely not. But it's just how you get the points. It's how you get the points. So I didn't think it was worth even pushing back.

Despite the fact that Kristin had the same concern as Katherine, the unwritten "game" of medical school won out. After Dr. Preston's debrief of the case, Kristin now knew how to get the necessary points in the future, and that was what mattered to her. Kristin's testimony attests to the strength of the medical student habitus and how it drives the medical students to be responsible to themselves as individuals, rather than responsible to the collective.

Subsequently, during the Pediatrics focus group, Katherine's name came up again, standing out as the only named classmate willing to rock the boat.

> Courtney
>
> We definitely have a few people in our class who will rock with the boat. Katherine is a friggin badass. She rocks the fucking boat. She speaks her mind. She advocates a lot, for a lot of things. There are some things where I'm like, "alright, alright, yeah, simmer down." But most of the time yeah, I'm like, "wow, I wish I had that."

I explored this more with the students: "Why does she have it? What do you think?" Kristin said bluntly:

> She doesn't care. We were with her neuro. Our senior resident started assigning us patients and then started to assign us a second patient. Katherine was like, "actually, this is our exam week. Is okay if we just take one?" And I was shocked. The resident was like, "oh, yeah, that's fine." And I was like, "wow, sometimes it just takes asking." But I think she just doesn't care, like it doesn't matter to her.

In Kristin's summation of Katherine, she draws attention to Katherine's medical student habitus which differed from hers. Kristin was even shocked when Katherine did not play the game that Kristin had subscribed to in medical education; namely, passively accepting orders from seniors.

Rather than legitimating Katherine's active role in her educational environment, Kristin equates Katherine's behaviors to not caring, which speaks to the all-or-nothing nature of the medical student habitus.

Despite Kristin's characterization that Katherine did not care, Courtney shared a side of Katherine that meaningfully exuded care:

> Courtney
>
> You remember the last day of neuro with the brain mets diagnosis with Dr. Collins? How horrible that news was? It was the day before our exam. Dr. Collins like blindsided this patient by saying like, "Yeah, you have like metastasized cancer." The patient didn't even know they had a primary cancer. And then when the patient asked him about next steps, he was joking around, "Oh, yeah, don't worry. I've got a toolbox in my garage. We'll take it out. No worries." It was our exam week and Kristin and I were freaking out, trying to get out of the rest of the day to be able to go home. And Katherine went back into the room and sat with the patient for literally hours and walked them through next steps and made sure that they knew what was going to happen. She was like, "Anytime a doctor comes in here, you should write down what they say." I was like, "Damn, the day before an exam, you took the time to do that and correct what was wrong." So yeah, she's cool. She's cool.

Courtney speaks to the practices aligned to the medical student habitus: find a way to get home early to study for an important exam. Katherine, again, did something different than what the medical student habitus encourages: she went back to the room to support the patient. Therefore, both Kristin and Courtney identify Katherine's alternative practices that do not align with their

medical student habitus. In both cases, they seem to admire Katherine, but it did not translate to meaningful solidarity with her: specifically, neither of them supported her during the feedback session or joined her with the patient.

Finally, as we were wrapping up the final focus group, Cara disclosed one time she spoke up against herself and her self-perceived failing of the medical student code of ethics:

> Cara
>
> I think I've told you guys this. August of first year, I was very bad. After our first exam, I went out drinking at a house with like 20 people or whatever. And the next day, someone tested positive for COVID. So, I was like, "Oh, shit." So, I did the responsible thing. And I emailed Dean Davis. "Dean Davis, I went to a party. Someone at the party tested positive for COVID. Don't worry. There were five of us there, and we're going to get rapid COVID tests tomorrow."
>
> Kristin
>
> Oh my god.
>
> Cara
>
> 10 pm, I get a call from Dean Williams. "How could you possibly hang out with people? You were wearing a mask?" No, I wasn't. She was like, "Well, you don't need to go get tests. We'll find you rapid tests around here." I was like, "Nope, we're gonna go get them." None of us had COVID, but I friggin notified the Dean.

Kristin, laughing

I am so sorry but that's so funny.

Samuel, laughing

That's crazy.

Cara

Dean Williams hit my line at 10pm to yell at me, to like scold me. I slept over at someone's place. No, I'm not wearing a mask. It was iconic. I was trying to be responsible. Imagine if I got kicked out of med school for that.

Samuel

Is she your MSPE (medical student performance evaluation) letter writer? That would be hilarious.

In Samuel's call out to the MSPE, which is the individualized cover letter for each medical student written by administrators that is sent with each residency application, he again draws attention to how speaking up can lead to detrimental consequences for the evaluations required for residency. This instance seems extreme, and the students laughed with Cara, but it is a testament to the strength of the medical student habitus, which drives Cara to jeopardizing her individual reputation in the program by reporting herself to the administration. Throughout the year, she did not report any unprofessional behavior of her superiors, yet within the first month of medical school, she reports herself for her self-perceived unprofessional behavior. It is also a call out to the role of the administration in governing, regulating, and upholding the medical

student habitus. Moreover, this example implicates the strength of the medical student habitus in the beginning days of medical education.

Conclusions

With an analytical eye towards social reproduction, professional identity formation around social justice and advocacy was more of a story of sameness rather than individuation (Sternszus et al., 2023). In this medical school context, a culture of "don't rock the boat" is apparent, and it is one that perpetuates the inequitable structures that define biomedical practice in the United States. From this study, "don't rock the boat" is a significant part of the medical student habitus, as students deploy practices to evade disrupting the status quo, including keeping silent in class and not reporting negative experiences in their learning environment in clerkship evaluations (Bourdieu, 1990, 1991). Even in anonymous settings, medical students found the risk of retaliation by their superiors outweighed their professional duty to act when they witnessed oppressive conditions or behaviors.

Moreover, these students have an inherent sense of when they would speak up: when something was "egregious" or when they had studied enough. However, there is a real sense that it is almost never safe to speak up when there is power over you in this context, which some medical students note is ubiquitous within medical education and practice. Interestingly, the medical students and faculty member hold this belief even when they could not name instances of retaliation, which speaks to the extreme power imbalance within the medical school learning environment. Moreover, the medical students identify the "game" of medical school, a clear signal of their understanding of the doxa of the field (Grenfell, 2014). They understand that "not

speaking up" is the way they gain enough symbolic capital, via good impressions, good evaluations, and personal connections to their specialty, to move on in their careers (Bourdieu, 1990, 1991). Therefore, the hierarchical learning environment in medical education is at odds with the professed professional value of social justice and the curricular mandate to address bias in self, others, and processes of medicine (LCME, 2022).

There is a growing body of literature within medical education that explores how to teach medical students to address the social determinants of health and inequity (Cabey et al., 2024; White & Greene, 2024; Onuoha et al., 2024; Metzl & Hansen, 2014). Exploring how and when medical students spoke up suggest that one-off exercises embedded in the curriculum are not successful in mitigating an understanding that speaking up can detrimentally affect future careers in medicine, most important to the medical students in this study: securing a residency spot. Therefore, there is an urgent need to understand and address the precarity medical students perceive during their training in order to actualize the aims of health equity curricula. Exploring how medical school programs that guarantee placement into residency upon matriculation are useful contexts for comparison. Additionally, medical schools that provide full tuition for students provide another context to explore this intense sense of precarity. These findings should also be interrogated by national bodies that structure the medical education, residency system, including the AAMC, USMLE, NBME, LCME, and ACGME.

Additionally, the students in this study implicate structural components of medical education in the United States: admissions and administration. Therefore, exploring how the admissions process and administrative surveillance play a role in perpetuating a culture of "don't rock the

boat" are important arenas to explore how the field of medical education shapes the medical student habitus. Moreover, Wendland (2010) describes a culture of medical students in Malawi that meaningfully integrates addressing the social determinants of health as part of their clinical purview. Therefore, exploring other international contexts may provide more insight into how the field shapes the medical student professional identity around social justice. Although this study is limited in scope and thus limited by demographics of students represented, the medical school curriculum does align with national standards improving its generalizability. However, exploring how gender, race, socioeconomic status, well-being, and debt burden shape professional identity formation around social justice are critical factors to understand. These future studies are well-situated for mixed-methods projects.

This study also highlights individualism as a guiding principle of the medical student habitus. The students learn they must protect their own reputations to successfully progress through medical school. In the example with Katherine, none of the students spoke up to support her critique of the standardized patient examination even when they shared the same beliefs. Moreover, the students also name remoteness to injury as a barrier to speaking up against bias they witnessed in the learning environment. Therefore, a critical component missing in medical education is solidarity and a responsibility to others. Community-engaged learning experiences, adopted as an accreditation standard by the LCME in 2008, is one well-studied intervention that promotes social accountability in medical students while benefitting the community (Dharamsi et al., 2010; Pong & Leung, 2023; Palakshappa et al., 2022). This study suggests it should be more meaningfully integrated into medical education. Pushing even further, Razack et al. (2022) call

for a professionalism of solidarity coupled with the commitment to act in partnership with stakeholders to address inequities.

Notably, many medical students in this study felt sadness and shame when they resigned themselves to not speaking up. This is evidence of an incomplete habitus, which is ripe for intervention. New spaces must be created for medical students to come together with their colleagues to reimagine the medical education learning environment to be able to live up to the standards the profession has set for itself, including social justice. The recent increasing trend in resident organizing and unionization is an under-researched phenomenon that may provide insight around medical trainee empowerment to address bias in their work environments and health delivery system with the appropriate protections in place (Reinhart, 2023; Bowling et al., 2022; Brajcich et al., 2021).

Reform without change has defined medical education since the mid-twentieth century. We should utilize analytical tools that reflect that. In this study, moving from professional identity formation to social reproduction elicits how the system of medical education shapes the medical student habitus, despite the medical students desires to behave differently. These understandings are critical to better align interventions in medical training with the professed values of the profession. Though there is an obvious sticky nature to the social reproduction occurring in medical education, the modern physician professional identity has been constructed and maintained by our community, and thus we have the power to change it.

Chapter 3

“That’s good data:”

Moving from a Sociology of/in Medicine to a Sociology by Medicine

Introduction

Ethnography is a qualitative method of social science that utilizes direct observation to understand and explain the lived experience of the observed (Tavory and Timmermans, 2014). The classic characterization of ethnography as framed by Geertz (1973) is "thick description." Geertz put forth the task of the ethnographer to generalize within cases. Glaser and Straus (1967) push Geertz one step further as they promote an inductive method of theory development built upon thick description. Burawoy (1998), on the other hand, argues for a deductive approach that begins with a theoretically informed perspective which shapes case selection and analysis. The primary aim of the extended case method is to reveal how structural forces shape the local setting. Together, ethnography seeks to explain how institutions and individuals interact.

Atkinson and Pugsley (2005) outline the fundamental tenets of ethnographic work: meaning, context, process, knowledgeable actors, and rational actors. These tenets require the ethnographer to take up an analytic position of cultural relativism, in which one attempts to understand a social organization in its own terms through studying the ordinary, mundane reality of social life. Participant observation is the defining methodology of ethnography, through which the researcher studies the social world by direct engagement with it. It is a research method that requires a deep and long-term engagement in the field, continuing until the researcher is no longer acquiring new information about the setting. Ethnographic fieldwork also often includes interviews and focus groups with informants or analysis of documents and texts to provide further perspectives on the field. These observations and transcripts are then transformed into data via detailed fieldnotes, which are concrete reconstructions of what was said and done in the

field. The fieldnotes are then coded for themes inductively and/or deductively in relationship to the theoretical literature.

Given the connections between theories of structural processes and individual experiences, ethnography is a tool that is particularly suited to study processes within medical education. Historically, ethnography has been the dominant methodology within the sociology of medical education literature, spanning more than 50 years. From Merton et al.'s (1957) "Student Physician" structural functionalism, to Becker et al.'s (1961) "Boys in White" symbolic interactionism, to Fox's (1957) "Detached Concern," and Hafferty's (1991) "Cloak of Competence," ethnographies are at the heart of the cannon of the sociology of medical education, moving from observations of lived experience to theoretical understanding.

A significant debate emerged within this tradition: a sociology in medicine or a sociology of medicine (Straus, 1957; Gevits, 1986; Vinson, 2023). The sociologists of medicine studied and critiqued the organizational structure, roles, and functions of medicine as a system outside of medical institutions. The sociologists in medicine collaborated with physicians to research medicine through an interdisciplinary lens, relying on sociological training to study the concerns of the medical establishment. However, the sociology in medicine stream quieted in the 1980s and 1990s. Vinson (2023) highlights that sociology failed to become institutionalized in medical schools and adds that sociologists of medical education turned to structural analyses of the organization of the medical profession as health care was consumed by managed care models. Overall, as medical sociology became more critical of medicine and the field of sociology of

medical education became more interdisciplinary, the sociology of medical education and its relationship to medicine loosened.

More recently, ethnographies of medical education have been in the sociology of medicine camp. As researchers turned their attention to the rise of managed care, new impingements on the profession of medicine began to arise (Jenkins et al., 2021). Additionally, scholars study the responses from physicians and medical education to calls for patient-centered care in the context of rising patient safety and consumerism trends (Szymczak and Bosk, 2012). Other scholars explore how new standards placed around medical school and residency training constrained traditional forms of medical professionalism (Mizrahi, 1985; Szymczak et al., 2010; Brooks and Bosk, 2012; Perrella et al., 2019). Primarily through ethnographic research, sociologists of medical education continue to explore how changing structural factors have shaped and reshaped medical education in the present.

However, there is a recent emergence of dually trained physician-social scientists who integrate ethnography into their practice, adding a third dimension to the debate: sociology by medicine (Holmes et al., 2017). There is evidence that ethnography by biomedical trainees can disrupt the socialization process of biomedical training. Schlesinger et al. (2021) describe the formation of the “fractured habitus” and the role of clinical ethnography in MD/PhD training. The authors define fractured habitus as the subjectivity that emerges from embeddedness in systems that perpetuate harms while aiming to ameliorate them through research and clinical practice. They argue that their dual training enables them to trouble the applied/theoretical divide between medicine/anthropology as they interrogate medicine while learning and practicing it. Through the

workshop setting, the MD/PhD trainees begin to develop a coalition of clinicians to mobilize against the rigid health care system.

Additionally, Sufrin (2015), a physician-anthropologist, also reflects on the generative potential of the duality of the fractured habitus. She argues that the role of doctor and role of anthropologist become mutually constitutive, revealing the “congruities and cracks in each discipline’s ethics of care” (p. 614). She finds that the entry and relationships afforded to her as a doctor are more like observant participation than participant observation and the ethics of her research move beyond the disciplinary bounds in both dimensions. She highlights how anthropology’s ethics of “taking care of relations" challenges and expands the clinical ethics of “taking care of the person,” along the lines of autonomy, beneficence, and maleficence. She argues that biomedicine’s constraints around compassion and care may prevent healing if it begins and ends with patient autonomy. Moreover, she argues that clinical ethnographies by clinicians enables clinicians to provide immediate solutions that alleviate suffering and mount a critique that is aimed at long-term change. Therefore, there is evidence that building opportunities for clinicians and trainees to participate in ethnographies of clinical care and medical training would be generative in promoting a new subjectivity in medical education and practice that is more attuned to structural drivers that shape clinical outcomes.

Complementary to dual training in medicine and social science, and in a departure from traditional ethnographic methodology of participant observation, participatory action research (PAR) is a scholar-activist methodological framework that involves the participation and leadership of people experiencing issues to produce new knowledge that is oriented towards

social change. It builds upon four key principles: authority of direct experience, knowledge in action, research as a transformative process, and collaboration through dialogue (Cornish et al., 2023). Critically, as an emancipatory research paradigm, it brings together scholars, community members, and activists to co-create knowledge-for-action in service of a community's goals. Methodologically, this research relies on building relationships, establishing working practices, establishing common understanding, collecting data, collaborative data analysis, and planning and taking action (Cornish et al., 2023).

Currently, medical students are trained to intervene on the biological determinants of health rather than the social determinants of health, as the majority of medical school curricula teach health inequities as boxes to be checked rather than structures to be transformed (Sharma et al., 2018; Metzl & Hansen, 2014). Therefore, there is a significant gap in knowledge-for-action within medical education around health equity topics. Moreover, there is evidence that medical students experience their medical education around social determinants of health as a training in helplessness (Connolly, 2023). And, national reports show medical students remain underprepared to address and intervene upon the social determinants of health at graduation (Neff et al., 2020; Wagner et al., 2016).

PAR is an underutilized tool in medical education. In cases that PAR was utilized in the medical school context, there is evidence that PAR increases hope for change within oppressive structures (Foreshew & Al-Jawad, 2022). Additionally, Findyartini et al. (2023) utilized PAR to address the hierarchical learning environment and successfully engaged medical students and teachers in revealing the problems of medical education and co-producing plans for

improvement. PAR has also been used to increase dialogue and bridge the gap between health professionals and patients living in poverty (Hudon et al., 2016). Therefore, participant action research principles embedded within medical education ethnographies may provide a useful intervention for medical students to participate in contextualizing their training in terms of data, theory, and action (Schlesinger et al., 2020; Suffrin, 2015; Holmes & Ponte, 2018). In this paper, I describe my hybrid ethnography of a medical school as a dual physician-social scientist trainee and the organic evolution to participatory action research as my research diffused to my research participants.

Methods

From May 2022 until May 2023, I completed a hybrid ethnography of clinical medical education. I attached myself to one track of third-medical students at a medical school in the Northeastern United States. At the time of this study, the medical school curriculum adhered to the traditional medical education model of two years of preclinical, basic science curriculum followed by two years of clinical curriculum. Learning the social determinants of health in this medical school looks like a longitudinal case-based small group course that meets over the first year of medical school, exploring bioethics, epidemiology, healthcare policy, and health humanities. Research reveals that the social determinants of health curricula at this medical school align with national trends that basic and clinical sciences take precedence, health equity curricula is predominantly located in the preclinical years, and case studies are the primary form of teaching (Lewis et al., 2020). Therefore, there is evidence that this medical school learning environment aligns with national medical school curricular trends and is a suitable setting for this study.

During the third year, medical students spend time in the inpatient and outpatient clinical settings, moving through each specialty learning how to be a physician and function within the healthcare team (Beck, 2004). There is evidence that the clinical years of medical school is the most significant period of socialization during medical training (Han et al., 2015; Becker et al., 1962). Third-year medical students at this medical school are also enrolled in a Clinical Bioethics course which meets monthly for two hours in the evening to explore complex ethical decision-making. There is also an embedded population health thread during their clinical year, with dedicated lectures on healthcare economics and cultural humility.

Clinically, during the third-year of medical school, medical students move through "clerkships" in Emergency Medicine, Family Medicine, Internal Medicine, Neurology, OB/GYN, Pediatrics, Psychiatry, Surgery, and an elective block. During the elective block prior the beginning of the mandatory clerkships, I conducted hour-long semi-structured interviews, loosely based on life story methodology (Russell, 2022). These were held on Zoom allowing each student to choose a comfortable, private context within their busy schedules. In these interviews, I sought to understand the students' journeys to medical school, how they were making sense of their education, their future plans, and what their conceptualization was of the physician role in social justice efforts.

During each clerkship, there is an orientation, specialty-specific lectures, standardized patient experiences, and observed patient encounters within the primary responsibilities of joining a clinical service and participating in patient care in both the inpatient and outpatient settings. To

explore this context, I embedded myself as a participant observer. I sought to understand how medical students learned to make sense of their role in acting on the social determinants of health in the clinical learning environment. I attended each Clerkship Orientation and weekly clerkship-specific didactic lectures. I observed each medical student once per clerkship. I intentionally varied the setting that I observed each student from clerkship to clerkship, observing them all in outpatient, inpatient, and surgical settings. I primarily attended morning rounds, the standard modality of inpatient clinical teaching in teaching hospitals, when medical students and residents present their patients' clinical data to the attending physicians. The attendings then offer feedback, clinical teaching pearls, and formulate an acceptable plan for the day. In each encounter, I was attuned to the layering of the formal, informal, and hidden curricula (Hafferty, 1998; Paul et al., 2014).

In total, I completed more than 500 hours of participant observation over the year. I took notes during observations on my clipboard, identical to the ones that the third-year medical students have in their oversized white coat pockets. I wrote down as many direct quotes as possible, observed body language, and things unsaid. Demographics were observed rather than collected. All names were converted to pseudonyms with personal identifiers altered as to maintain anonymity of participants. To further protect faculty and student identities, I intentionally changed clerkship specialty context as to prevent identification. At times, I also changed language, attribution, and/or setting of quotes to decrease specificity of encounter. To ensure my observations were as accurate as possible, I would often ask clarifying questions to the medical students as we moved to the next patient's room or text them about it later. I aimed to transcribe detailed fieldnotes of the interactions that occurred during my observations within 24 hours.

To further improve accuracy, after every clerkship, I paired this fieldwork with two hour-long focus groups with 4-5 medical students. We began each focus group with the students identifying and exploring encounters that stood out to them from the clerkship. Together, they would also explore how each specialty addressed the social determinants of health and what they would be taking away from the clerkship. I often asked probing questions, and over the course of the year, the medical students began asking probing questions of their classmates. The student composition of the focus groups was intentionally varied to increase interactions and solidarity among the group. The project was approved by both the medical university and Syracuse University's Institutional Review Boards.

Reflexivity

My entry into the field was eased by my dual status as a MD/PhD student who completed my medical training at the same medical school. As I returned for this project, I wore the same school-issued short white coat as the medical students I joined. I also wore my medical student badge signaling my belonging. Over the year, I took pictures for a couple holding their new baby delivered moments before by cesarean section, hugged grieving family members, supported a woman's leg as she delivered her second child, whispered answers to questions to the medical students, played in co-ed soccer games with attendings and students in this study, and even attended baby showers. Yet, in other moments, I remained in the periphery attending to the ways the medical students moved closer to the attendings as they presented, put their leg on the wall mimicking the faculty member, or fell asleep in the corner of the work room. I also deployed my professional identities differently over the course of the project exploring how access and trust

was offered according to the MD and PhD trainings. I also remained curious about how faculty and students engaged with me depending on what parts of my academic identity I put forward, and why in some settings I felt like I had to minimize my research interests to "keep the door open" (Reyes, 2018).

I thus drew upon Seim's (2021) hybrid ethnography, a suitable methodology for my fractured habitus (Schlesinger et al., 2021), fluidly transitioning between participant-observer and observant-participant. Entering the site with the inculcated disposition of a medical student equipped with social theory and research methods to explore the processes of medical student socialization requires an effortful commitment to reflexivity. Throughout my observations and field note taking, I constantly engaged with how my medical student status influenced the conversations I was having with the medical students and the ones that were occurring around me, my perceptions of the medical students' behaviors, and my attention to some details over others. Moreover, I critically engaged with the notion that my ease of access, social position as a MD/PhD student who completed clinical training requirements in a hierarchical learning environment, social position as a White woman, and subjectivity of attending medical school at the site I studied influenced the data that I encountered (Stuart, 2018). Practically, this looked like a system of field notes in which my feelings and experiences in the field were included parenthetically as to separate them from my observations. After completing fieldnotes for the day, I wrote an analytical memo around themes that were coming up in the field and how they did or did not fit within the literature. I used ATLAS.ti (2022) to code the field notes for emerging themes.

Results

“Good data”

Throughout the year, the students that were participants in my study consistently identified moments where I should turn my attention. At times, in the middle of their sentences, they would catch themselves- “That’s good data”- and then return to what they were saying. For example, Elizabeth, a White woman in her mid-twenties looking towards a surgical specialty, shared in a focus group with four of her peers:

> Elizabeth
>
> Would I love for things to be better? Yeah, but like, am I still gonna do it? If it's exactly the way it is now? Like, yeah. The problem is all of us are so willing to do it because we knew kind of what it was going into it. At this point, you already signed up in a sense… you signed up for that knowing that was what your future looks like. Would I love for it to be different, sure, but I'm still gonna do it regardless.
>
> Hannah
>
> Is it your responsibility to make it better for future?
>
> Elizabeth
>
> I think if I'm a senior resident or an attending I would love to treat my, people who are young… I can’t speak English…Treat all my like juniors… juniors. I was gonna say subordinates… that's good data… make them better or make sure their learning experience is a little more friendly. I want to work within teaching hospital like that's

something I want to do, but I don't know if that's something I'm gonna try to work from the inside out.

Here, Elizabeth pauses mid-sentence to highlight that she was going to say subordinates instead of juniors. She notes that was “good data” for me to collect, as she catches herself from using language that further engrains the hierarchy of medicine.

During the Internal Medicine clerkship, I met Rebecca, a White female who was interested in a primary care specialty, in the afternoon for chief rounds, which involved seeing patients with a chief resident who could offer some tailored feedback after observing a patient interview. However, the chief deemed there were no “suitable” patients for learning, so he offered to do some teaching specific to the end-of-clerkship exam. He chose to cover congestive heart failure. After running through the pathophysiology, he brought us over to a desktop computer in the corner and demonstrated what it would look like to order treatments for a patient with congestive heart set. He pulled up an order set which is embedded into the electronic medical record providing the algorithm for ordering. One of the checkboxes was “is this patient African American?” He showed what would happen if you checked yes. My stomach dropped as I watched BiDil become the appropriate treatment regimen, compared to another treatment protocol for White patients.

I asked the resident if he knew anything about the history of that drug. He said he didn’t, “I just check the boxes.” I explained the race-based algorithm and the bad science that the BiDil trial was based on, given that it only included Black patients (Brody and Hunt, 2006; Vyas et al., 2020). He got a little flustered, his face turned red, and there were drops of sweat forming on his

forehead. He said he wasn't aware of any of it and was glad I said something. He wrapped up, and Rebecca and I walked down to the hospital Starbucks for a coffee. As we stood in line waiting for our fall-flavored lattes, she said to me, "He was sweating. That was good data for your project." She was right.

Later in the year, during a professionalism session led by senior Family Medicine faculty, Elizabeth texted Courtney, another White female student thinking about a surgical career, and me in a group chat:

Elizabeth

The whole encouraging med students to go back and clean up the attending garbage bedside manner after the fact is wild. Also wild how much it actually happens.

Courtney

I hope you got some rich data, Hannah.

Elizabeth replied to us both:

The most annoying thing is that this type of behavior on rounds just makes some people in our class think this shit is okay and the conversations I've had with some people are truly terrifying. Hannah, I'm directly talking about that conversation we had with the other med student when I was on neuro surg. "People who are not surgeons do not deserve my respect because they are less than me." And doubled down on it.

Courtney

Yo wtf.

Elizabeth

It was one of the most painful conversations I have been a part of during med school.

In this clear call out to “rich data,” Courtney underscores Elizabeth’s commentary that medical students are responsible for ameliorating attendings’ unprofessional behaviors as something to explore. Elizabeth goes further connecting this notion to a moment we shared during a brain tumor resection operation. After she alluded to that moment “with the other med student,” I went back to my fieldnotes from that day and found I had underlined and circled “wild,” next to direct quotes from a male medical student saying, “I have the ultimate total respect for other surgeons and not for anyone else in here.” Therefore, there is evidence that the medical students were spontaneously contributing to data collection and analysis as participants in this ethnographic study, more reflective of participatory action research than traditional ethnography.

Theoretically, the project also diffused to the medical students and shaped their observations of their learning environment. During an Emergency Medicine shift, Josh asked me if I had heard about any of the “biohacking stuff” from Dr. Haberman. He shared that he just listened to a podcast that had a researcher from Stanford on talking about how the root of everything is social interaction. He shared he had been thinking about that in the context of my project. He said that he's even now trying to make an effort to say hi to people in the grocery store and in the hospital to build some more connections. Therefore, there is a sense that the goals of my project became shared with the students.

Reminiscent of a sociology in medicine, at times, the medical students would gesture for me to write things down, look over to make sure I was taking notes, or even direct my observations. During her surgery rotation, Courtney texted me an update about her experience with faculty:

> I've been loving it. Most of the attendings are awesome, one won't even acknowledge me lmfao. Like I say, "good morning," and she keeps walking... She is friendly to everyone else. Apparently she is known to do this with med students, it's like fucking hazing lmao. And on evals writes "needs to be more confident." Like how can you even assess that when you won't even talk to the student lmfao… Yesterday in clinic, I was like, "Can I present this patient?" And she didn't even look up. So, I just started presenting. No feedback or questions for me at the end. She'd just get up and walk to the patient room. And I did that for every single patient. Awkward. Anyways, try to tag along with Elizabeth when she's on surgery. You'll see it. Dr. Price.

With this prescribed direction of research, Courtney becomes a collaborator and producer of knowledge in the project, expanding beyond the role of an ethnographic informant.

Earlier in the year, during morning rounds at a local Addiction Treatment Center, Kristin, another white female medical student, Rebecca, and I sat around a large table in a fishbowl-like conference room. It's floor to ceiling windows looked into a courtyard which peered into the patient waiting room, which was a large foyer guarded by tall, White men wearing bulletproof vests, who were facilitating patients through the metal detectors.

As the meeting began, Kristin said to me "this will be really good for you to see." It was the second time she had said this, I noted in my fieldnotes. We logged onto Zoom that was

connected to the large screen hanging on the wall. The meeting began with all the faces on the screen raising fingers for how many cases they needed to talk about. When the first case was presented, they put a picture up of the patient for everyone to see. It almost looked like a mugshot, I wrote in my field notes. The staff member opened the discussion with sharing that the patient's friend had recently passed away, noting the vulnerability and risk for her sobriety. The next patient was brought up on the screen with another picture. This time, I said aloud to Kristin and Rebecca, "Wow it looks like a mugshot." Rebecca agreed:

> Actually, yeah it really does. It's almost worse at the inpatient facility that we go to. The patients have to wear their mugshots on ID badges. It is interesting though because they really do start to look better after 2 weeks. I had one patient who actually showed me her picture on her badge and said look at how much better I'm looking.

As Kristin primes my attention for observation and Rebecca offers more data related to my observation of the carceral tone to morning report, the two organically and actively participate in knowledge production.

During the Ob/Gyn focus group, Corey got to the classroom a bit early. Dressed in his button-down and khakis, hair progressively getting longer clerkship to clerkship, he shared in a half-joking tone:

> Hannah I've been meaning to tell you. I got choked in the resident room. The attending just put his hands around my neck and made me stand up and sit down. He didn't ask. He just did it. He was trying to demonstrate asphyxia or something. Everyone was just looking at each other… shocked. He literally had his hands around my neck. This would never happen anywhere else. And, no one said anything after.

Corey explicitly remembered an experience to bring to the focus group to be collected as data. He also has a conceptualization that context matters, and the OB/GYN learning environment was somehow different than the others which enabled the unacceptable behavior when a faculty member crossed a personal boundary.

After a surgery grand rounds lecture that was focused on medical education, Courtney sent me four texts in a row:

> Hannah, you should've been there. So uncomfortable.
>
> "We don't owe you anything."
>
> There was a slide of common med student complaints, and one of the things was "we pay tuition, we deserve a good education." And he wrote that off as a sense of entitlement.
>
> I don't think anyone's asking for anything but to be treated with respect.

Her texts signal she was thinking about appropriate observations for the project while she was sitting in a room full of faculty, residents, and clerkship students. In this case, the faculty member shared examples of past medical student complaints about the clerkship on slides in front of the entire audience. Courtney summed up the attending's tone of the presentation: "We don't owe you anything." She even disagreed with the presenter's assumption that medical students wanted anything but respect. And, she shared it with me as data even when I was absent. In effect, she takes on a real role in data collection.

There were also times when the students would exchange looks with me, making sure I was writing things down. During an emergency medicine weekend shift with Kristin, we were tucked into the back of the bubble, a small closet sized room that had a counter with computers on all three walls. The attending came over to the two medical students in the room, “One of you want to sew?” Each of them perked up and emphatically said, “Yeah!” Kristin walked it back, “I’ve never done it, is the face an appropriate place to learn on?” The attending shrugged her shoulders in a noncommittal way. Kristin came over to my side of the counter and said, “You know what?” she looked intently at my notes implying she wanted me to write this down, “we really should do suture clinic for everyone at first. We haven't gotten it yet, so we have to wait until surgery. And I do have the chance here, so this needs to change.” Here, Kristin used my notes as a mechanism for change. This suggests that Kristin was more comfortable providing her experiential knowledge through my research than through the channels that are offered to them in their clerkship orientation: anonymous evaluations, clerkship administrators, faculty preceptors, and Deans of medical education.

Structural Gaslighting

Despite their noticing of the clinical environment, the medical students consistently did not trust what they were witnessing. In the following examples, there is evidence of the gaslighting of biomedical education. Gaslighting involves “raising doubts about a person’s ability to accurately perceive and understand events and can thus harm them in their capacity as a knower” (Berenstain, 2016, p. 580). Sweet (2019) conceptualizes gaslighting as a sociological, rather than psychological, phenomenon. She argues that gaslighting is “rooted in social inequities” and

"executed in power-laden relationships" (Sweet 2019, p. 851). In different words, Holmes (2013) draws attention to how biomedicine acts as an anti-politics machine that disconnects suffering with its drivers, blaming sickness on the individual's behavior rather than the oppressive political, economic, and social structures, which I argue is a form of structural gaslighting.

During a neurosurgery case, Elizabeth and I were not scrubbed in and observing from the periphery. We watched the pituitary tumor resection from the screen. It was an interdisciplinary case, also involving an Ear, Nose, and Throat (ENT) surgical team. A White male medical student, Eric, accompanied the ENT team, and joined us in the periphery. At one point during the surgery, he asked Elizabeth what clerkship she was on and what specialty she was going into. She shared that she was on Neurology but interested in General or Vascular Surgery. It was as if that admission opened the floodgates for Eric: "I do not respect Neurology. I respect hard work. I have the ultimate total respect for other surgeons and not for anyone else in here." Floored at his seriousness I asked him, "How are you going to work with the team as a surgeon?" He replied, "You can acknowledge them but not respect them. You don't need to respect them. It's the best environment between surgeons, and no one else." I asked him what about surgery was so compelling to him. Eric replied,

> It's the doing things with your hands. If I have a bad day, I'm 12 hours with my thoughts in internal medicine. In surgery, after 10 minutes with my hands, my day is better. We are mechanical beings. It's a lot less abstract than we make it.

At this time, Elizabeth walked away to the other side of the room. Eric kept talking to me about his newly discovered passion for surgery as the ENT surgeon carved a pathway through the sinuses to access the pituitary tumor.

After arriving at 5:10am for the surgery, I left for the afternoon to work on fieldnotes, so I did not get to follow up with Elizabeth about that conversation. However, I saw her the next day in the hallway at her locker: "Hannah, did that really happen? I was horrified. I couldn't even believe he was saying that. He's a born-again surgeon. He is exactly what's wrong with surgery. I had to walk away." As a figure of speech or as a statement of disbelief, Elizabeth could not believe her observations of her classmate's reflection on a surgical career. She was horrified by her colleague's statements, but she was not empowered to do anything about it. Instead, she questioned if it even happened.

Similarly, I observed Courtney and James on their observed patient encounter during their Internal Medicine clerkship. A faculty member and a chief resident brought them to a patient's room and simply gave them the patient's name. It was Courtney's and James' job to elucidate why the patient was admitted and what they would prescribe for a plan. They were to share the interview. Courtney asked if they should figure out a way to split up the interview before walking in. James responded, "whatever is natural. We will figure it out naturally." However, as soon as we all stepped into the room, James dominated the entire interview. Courtney is not a shy person and effortfully attempted to ask questions. I wrote down in my field notes, "feels like they are fighting for airtime." However, at almost every question, James would rephrase or interrupt her. He also would answer questions that the faculty member directed at Courtney, and he was the first to do the physical exam. After they wrapped up the interview and correctly arrived at pancreatitis, we walked out of the room. The faculty member and chief resident did

some teaching and provided feedback on their interview styles. They did not attend to James' inequitable sharing of the interview.

Courtney and I walked out together. As soon as we walked out of the hospital, she said to me: "Hannah, did you notice how James cut me off or jumped in every chance he got? Was it just me?" I shared that I had also noticed that and included it in my fieldnotes. It is this second-guessing, or gaslighting, that undercuts Courtney's observations, which weakens her critiques of the gendered power imbalance among medical students.

Later in the year, Kristin sent me a text during her surgery clerkship:

> I love that our hours are M-F 6-6. The clerkship director said that's what the residents work. But we aren't residents lol. So as STUDENTS (emphasis hers) we work 60 hours per week & then get to go home & study? Nice lol. Is that your experience?

She critiques her surgical learning environment, but also questions if her critique is standing on solid ground with, "is that your experience?" This suggests that the individualistic culture of medical education prevents medical students from theorizing about their experiences in their learning environment.

After an emergency medicine focus group around the half-way mark of the year, I wrote down in my analytic memo, "one of the only times there was any push back."

> It was 30 minutes into the focus group, and I asked the group,
>
> "…anything that you want to talk about that didn't sit well or examples of EM that you will take forward?"

James

I don’t like working with the midlevels.[1]

Hannah

Can you tell me more?

James

Not just mid-levels. It was like the secretary. She was like being rude and stuff. Yeah, we needed a faxed record from like an outpatient ultrasound report. She like rolled her eyes when the attending asked for it. It's like dude what?

Hannah

Why do you think she does that? Why do you think she rolls her eyes?

James

She probably doesn't feel like valued or something. But like you're getting paid for like a job.

Courtney

I think that can be a dangerous statement to make. “I don't like working with mid-levels” because then you're like putting… you’re categorizing them in this big monolith. Like you're going into every encounter going forward like, “oh, you're a mid-level. I'm not

going to work well with you.” I think like you're going to work with shitty doctors, nurses, NPs, and PAs.

James

That’s true.

Courtney

And like go into every interaction with those professionals like as if they're going to be good and make the best of it.

James

Yea, I’m missing a qualifier. I don't like working with like crappy mid-levels.

Rebecca

Laughed shockingly.

Courtney

Alright, I don't want to work with crappy anybody? Like you don’t like working with crappy doctors…

James

The person I’m thinking of isn’t even a midlevel.

The room quieted and we moved on to another question. However, after the focus group, Courtney sent me her characteristic series of texts:

> Is it just me or is so much of what James says off color regarding other providers?
>
> Dude he's so ethically questionable.
>
> I think "mid-level" to him is anyone who's not a doctor, including administrative staff.
>
> Nobody responded to what I said so I was like, "oh fuck, maybe I'm overreacting."
>
> He's good content for this.

Again, she points my attention to where I should focus my study: "good content." Yet, this is another time she demonstrates that she doesn't completely trust her observations. She puts weight into the silence of her peers, and then gaslights herself, "maybe I'm overreacting." This suggests that although she can notice the problematic behaviors of her peers, she is not empowered to believe her observations.

Just a few days before the Emergency Medicine focus group, I observed Josh's interprofessional Emergency Medicine shift, during which medical students attach themselves to a nurse to observe them complete a series of tasks including: IV placement, drawing blood, connecting patients to cardiac monitoring, and discharge planning. Josh was assigned to Michelle, a young White female nurse with blonde hair, wearing Figs and sipping from a Stanley cup. Earlier, we overheard Michelle say, "Can someone else do it?" when the charge nurse called her over the

handheld walkie-talkie, that all nurses wear in the Emergency Room, to assign Josh to her for the evening.

As Josh and I sat at the computer-on-wheels in the corner of the nursing station, behind Michelle, waiting to check off some tasks, Dr. Carson, the attending working across the hall, walked over to us and began talking to Michelle. Michelle and her were joking around, and they clearly had established an informal and supportive working relationship. Michelle said to Dr. Carson, "Thanks for saving the day, Carson," to which Dr. Carson responded, "I could not think of a better way to spend my day." The two spoke for more than a few minutes, and Dr. Carson was no more than three feet from us. Yet, she did not acknowledge Josh or me at all. I wrote, "Wow, she is not going to say hello" in my notes.

As soon as she walked away, Josh said to me, "I tried to wave to her, did you see me wave? You're my professor. I was with you this morning. She was my preclinical teacher too. Did that really just happen?" I affirmed his observation and shared that it made me uncomfortable that she didn't say hi. Josh continued, with more emotion than was normal for his laid-back self:

> We need to figure out how to get better teachers. she's signed up to do this and won't even acknowledge me. It's your job. You're in an academic medical center. You have to do this. I thought that I would have less teaching at the Family Medicine practices because they own their own practices and aren't paid to teach, but I got more teaching there. Am I off on this?

Again, Josh critiques a learning environment that allows preceptors to ignore students and calls for better system for faculty development, but he questions if his interventions were sufficient:

"Did you see me wave?" Moreover, he concludes with looking for some reassurance, "Am I off on this?" Overall, these findings suggest that medical students notice and critique their learning environment but are lacking the infrastructure and empowerment to transform their critiques into action.

Ethnographic Intervention

This ethnographic project not only enabled deep relationship with the students in this study, but also with the faculty and staff at clinical sites. During the first rotation, four students rotated through a particular clinical site, so I had four opportunities to observe the environment. Mateo, a medical assistant, who primarily served as the phlebotomist of the office, quickly became the medical students' safe haven. He would teach them how to draw blood and take a good history. The students and I quickly learned that Mateo was a physician in South America and came to the United States as a refugee fifteen years ago. Since his arrival, he has been committed to practicing medicine again. He took Step 1 three times, attributing his increasing English proficiency as the final key to passing the exam. He shared with the students that he had entered the Match twice, spending more than $5000 each time with neither match resulting in a residency position for him. The students adored him, often going to him for advice on patients before the attending returned to the nurses' station. He shared stories about his training abroad, working as the only doctor in a community upon graduation, and his passion for providing good quality care to patients.

Mateo stayed connected with some students via social media and with me through text. He was excited about this project, frustrated that caring for patients as people was not a central tenet in

medical schools in the United States. He texted me throughout the year, sharing updates about his re-entry into the Match. This time, he changed it up: he was applying to Family Medicine, a less competitive specialty than his preferred training that he had already completed at home, Emergency Medicine.

During March of 2023, I got a text from Mateo while I was in the operating room with Courtney. He shared that not only had he not matched, he also only had one interview throughout the season. He shared that he was still eligible to participate in the SOAP, a week-long period when unfilled programs can interview unmatched applicants and offer them training spots. Neither of us were scrubbed in, so I was able to whisper the news to her. Courtney's first reaction: "What can we do for him? Who can we talk to? The system is so broken. He deserves this more than anyone." We brainstormed and agreed to begin collecting letters of recommendations from students to send to programs. This action-oriented step grew from Courtney, which transformed a piece of this ethnography of medical education into a participatory action research paradigm.

Later that evening, Courtney texted me, "I'm writing right now about his grit. Like I fucking want the doctor that does not give up. And the thing is, he's so competent. Bullshit that Step[2] screwed him." She critiques the medical education system that defines competency by Step exams rather than what she perceives as meaningful competency, based on his years of training and practice. She channels her critique into a passionate letter of recommendation.

Ironically, 2023 was a historical year for Emergency Medicine, in which many programs did not fill their programs to capacity. Therefore, Mateo began putting applications together for

programs that he could SOAP into. In the meantime, Courtney, Elizabeth, Kristin, and other students that rotated with Mateo, wrote letters that were compiled into a letter of recommendation that was sent to the three emergency medicine programs that interviewed Mateo during the SOAP. The following excerpts are from students in this study:

> Courtney's Letter:
>
> Mateo IS AN EXPERIENCED DOCTOR (emphasis hers), and he is the type of doctor I strive to be. I had the privilege of working with Mateo during my family residency rotation where I was a medical student and he served as one of the office medical assistants. I learned a few days into my family medicine rotation from others in the office, not himself, that Mateo was actually a critical care doctor back in South America before immigrating to the U.S. Here, he has spent too much time fighting the unfair uphill battle of trying to rebuild his medical career and become a licensed U.S physician. He has undergone tremendous emotional, social, and financial sacrifice to fight this battle and deserves a chance.
>
> It is not an exaggerated statement when I say that Mateo – the medical assistant in my family medicine rotation – was the kindest, most knowledgeable, and clinically excellent instructor I've had all year. Family medicine was my first rotation of third year, and it was a challenge. Mateo consistently motivated me to be better every day. From the basics of blood draws to the management of an ICU patient in respiratory failure, Mateo taught me more than any textbook or lecturer could. Between patients, he'd challenge me to come up with a wide range of differentials and would walk me through why some things

would be more likely than others. He taught me how to think like a doctor. Mateo was extremely well-liked and respected by patients (many would even request him by name) and staff at the office. Mateo taught me how to provide patient care as a human. He was non-judgmental and an excellent listener. As a patient, you knew you would be receiving top notch care that day if Mateo was on your team. Mateo's clinical excellence and kindness aside, what stuck out to me most about him was his grit. Mateo's path to becoming a licensed physician in America has been extremely frustrating and non-linear. He has not been discouraged by the failures he's faced, but rather has taken each one as an opportunity to learn and come back stronger than ever. A doctor that learns from his failures and that uses them to fuel excellence is the doctor I want taking care of me.

In my five weeks with Mateo, he arguably taught me more about medicine and being a good physician than I've learned this entire year. He became a dear friend and mentor, and he frequently checks in on me over social media and roots for my success. Now is my opportunity to return the favor and root for him. Please consider Dr. Mateo for an available residency position in your program. Nobody is more deserving. I'm confident he will exceed your expectations and make the residency program and Upstate a better place. Please feel free to call me with any questions you might have about Mateo. Thank you for your consideration.

Elizabeth's Letter:

It is my pleasure to write this letter on behalf of Mateo. I had the great opportunity to work with Mateo during my very first clerkship of my medical school training. It was

daunting transitioning to a clinical role after the first two years of didactic, but Mateo immediately made me feel welcome in the office and offered to help my transition in any way he could. He was often a helpful sounding board when working on my patient preventions and a great teacher who helped me develop my differential diagnosis for patients. Mateo's clinical acumen was unmatched, and he always found ways to create learning opportunities for my classmates and I through buzz questions, helping us formulate work ups for patients and coming up with a succinct treatment plan. Mateo took the opportunity to teach me clinical skills such as how to draw blood, how to write post procedure notes, and how to collect and process labs and samples in the office. Mateo modeled hard work and dedication through his efforts to pursue a career in medicine in the US after already completing a medical education in his home country. He continues to do so while working full time and caring for his family. Mateo demonstrates all the characteristics and qualities I would in a physician and continues to use these qualities to enrich the lives of those around him. He was an integral part of my clinical education this past year and would be an amazing asset to any residency program.

Kristin's Letter:

Family medicine was my very first clinical rotation of the 3rd year of medical school, and Mateo went out of his way to encourage me and help teach me practical skills I would use during the remainder of my year, and during my clinical practice. Mateo had a busy schedule while working as a Medical Assistant, but he sought the time to help students and was always willing to help with various tasks around the office. I hope to be able to

> work alongside Mateo as peer physicians someday soon; It is evident to me he will be an excellent provider.

This concerted, collaborative effort was a consequence of data gathering around students who observed a special provider that invested in them as students and individuals. His name was brought up as a benchmark of true care throughout the year. Through ethnography, we were able to transform a collection of observations into an intervention, giving credence to what each medical student noticed about a standout provider. Perhaps, this letter of recommendation did not make a difference, and perhaps, it did. Mateo, after his third failed match, successfully SOAPed into an Emergency Medicine program and is one year into realizing his dream to practice medicine again in the field of his choice.

Together, this effort is evidence that ethnography of medical education is apt for including participatory action research principles. A medical student in the project drove the idea to write letters of recommendation based on their experiential knowledge working with Mateo. The students operated from a shared understanding that the medical education system is broken and rallied together to support a colleague. This example suggests that medical students are hungry to manifest their critiques into action and affiliation with medical education research is one suitable avenue to channel their critiques.

Conclusions

Medical schools are working to prepare graduate students who both identify and address the social determinants of health in the practice (LCME, 2022). Yet, they are consistently falling

short. There is even evidence that medical school fosters negative attitudes toward the poor (Crandall et al., 2009; Wayne et al., 2011). Therefore, there is a critical need to provide medical students with interventions that explore these attitudes. From this ethnographic study, there is evidence that medical students are attuned to the process of data collection but do not have the resources to translate their experiential knowledge to action. Participatory action research emerges as one medium to empower medical students to contribute to knowledge production and action around their experiences as medical students.

Specifically, participatory action research principles embedded in ethnographic research is a methodological turn worth exploring. Ethnography requires a practice of reflexivity because the ethnographer is inherently an instrument within the research and consequently shapes the data and analysis (Small & Calarco, 2022). Practically, Emerson et al. (2011) encourage the researcher to practice reflexivity in field notes by shifting between first and third person. Jerolmack and Khan (2018) offer reflexivity as a breaching exercise to better understand the logic of the social order and integrate breaches as part of theorizing. Overall, reflexivity can be understood as a tool to assess power dynamics in the field (Winfield, 2021). Given the neutrality of biomedicine and its design to obscure its role in social suffering, a practice of reflexivity within a PAR-influenced ethnography provides a rich opportunity for medical students to begin to intimately understand their roles in perpetuating health inequities while also contributing to scholarship and interventions to address it.

More specifically, as Sufrin (2015) maintains a reflexivity of how anthropology and medicine shape her research, Knight (2015) also describes the difficulty of marking the boundaries

between research, care, and intervention. She describes feeling "vulturistic, indebted, intimate, paternalistic, helpless, judgmental, empathetic, and confused over four years" (Knight, 2015, p. 28). Ethnography offers its practitioners a space and scaffolding to identify, navigate, and analyze these complex and conflicting emotions that often go unaddressed in or are actively suppressed and reconfigured by biomedicine (Underman, 2020). Through this reflection, the contradictions in the oppressive logic of biomedicine can be exposed by those practicing it, promoting a fractured habitus that motivates ethical implications for action: addressing a critical gap in academic medicine's aims to train socially responsible physicians.

Additionally, Winfield (2021) promotes competencies of self-awareness, participant-centered approach, recognition of social location, attention to trauma, knowledge of professional limits, and effective boundaries and self-care within the practice of a trauma- and justice-informed ethnography. Moreover, Winfield (2021) calls for a slow and deliberate scholarship and invites investigators to grapple with mistakes as moments for growth and reflection: a foil for medical education. Translating these ethnographic practices into a participatory action research program are concrete opportunities for students and practitioners to model justice-oriented and trauma-informed care through discrete skill-building in the research setting.

The interventional component of participatory action research also addresses the training for helplessness that medical students name around the social determinants of health. (Connolly, 2023). More specifically, social determinants of health curricula in medical education teach medical students about health inequity but not what to do about it (Sharma et al., 2019). Participatory action research thus aligns the aims of medical education to produce physicians that

both identify and address social drivers of health, homologous with the interventional logic of biomedicine (Bourdieu, 1990, 1991; Baranov, 2008; Morse & Loscalzo, 2020; Luther & Crandall, 2011; Geller et al., 2021). From this study, there is evidence that medical students are primed to do the work of co-creating knowledge-for-action based on their experiences in training.

Notably, biomedicine does not have the flexibility in its training to instill the theory and methods required to train its practitioners to create and complete a traditional ethnographic research project. However, Rubin (2021) offers an approach to ethnography that centers upon flexibility, presenting evidence that there is no right way to do qualitative social science. Moreover, a "good-enough" ethnography promoted by Rubin (2021) and Bourgois and Schonberg (2009) offers a first step for biomedicine to begin to work ethnography into its ethos and training. Interdisciplinary collaborations are critical in the venture to bridge biomedicine with ethnography. Moreover, the interdisciplinary, collaborative nature of participatory action research enhances this "good-enough ethnography" (Cornish et al., 2023).

This study did not intend to explore medical students' uptake of ethnography, rather it was a study that was designed in the tradition of the sociology of/in medical education to explore medical students understanding of their roles around the social drivers of health. However, it was quickly apparent that my ethnographic methods diffused into the medical students that I studied who quickly became co-researchers with me, pointing me to where I should complete observations and what was good data. Therefore, there in an underexplored dimension of the sociology of medical education: sociology by medical education. Future studies should explore

how medical students can be equipped with "good-enough" ethnography skills, what they decide to study, and how that does or does not translate to their ability to identify and address the social determinants of health. Exploring if and how ethnographic skill development ameliorates structural gaslighting is also a critical next step in building medical school curricula around the social drivers of health.

Together, ethnography provides scaffolding for biomedical trainees to politicize the anti-politics machine of biomedicine that obscures social suffering (Holmes, 2014). A participatory action research framework gives them something to do about it. Through ethnography, there is also evidence that the medical student habitus may fracture, opening spaces for more generative analyses and solutions to address and ameliorate the suffering that physicians seek to understand and treat. Therefore, a sociology by medicine is a new frontier for academic medicine to explore to move closer to their aims of training a professional body that identifies and addresses the social drivers of health.

Footnotes

[1]A mid-level practitioner is an individual practitioner, other than a physician, dentist, veterinarian, or podiatrist, who is licensed and permitted by the United States to prescribe a controlled substance. Examples of mid-level practitioners include nurse practitioners, nurse midwives, nurse anesthetists, and physician assistants. (USA DEA, n.d.)

[2] The USMLE Step 1 and Step 2 exams are the series of licensing exams in medical school, which are used to assess residency applicants' mastery of basic science and clinical knowledge. (USMLE, n.d.)

Conclusion

The story of medical education is one of “reform without change” (Bloom, 1988). When I read “Boys in White” for the first time after completing my clinical training in medical school, I sent direct quotes from the text to my med school friends laughing about how sadly similar our learning environment and experiences were compared to those in the 1950s (Becker et al., 1961). Not all things have stayed the same, however. The field of medicine has since integrated the professional tenet of social justice into its charter on professionalism. And throughout the years, there has been a growing movement within medical education to address health inequities and prepare medical students to participate in addressing the social determinants of health. Yet, medical education continues to debate how to train a professional body that can identify and address the social determinants of health in their practice (Ona et al., 2020; Sharma et al., 2018).

From cultural competency to cultural humility to structural competency and community-engaged learning, medical education has theoretically and practically grappled with ways to train medical students to participate in health equity efforts (Metzl & Hansen, 2014). Recently, there are even calls for critical pedagogy, emancipatory pedagogy, and more integration of social sciences and humanities to move us closer to actualizing our goals (Onuoha et al., 2024; Cabey et al., 2024; White & Greene, 2024). Yet, despite the curricular paradigms implemented to date, trainees still graduate underprepared to do the work of intervening on the social determinants of health (Neff et al., 2020, Eno et al., 2020). And, there is little empirical research on how medical students integrate health equity-related curricula into their burgeoning physician professional identity.

As a medical student, I listened to my colleagues degrade our social determinants of health curriculum: “waste of time,” “would rather be studying,” “pointless.” I also caught myself skipping assigned readings that I was genuinely excited about in order to get through extra repetitions of flashcards to memorize obscure genetic conditions for the test later that month. I found myself constantly asking myself and others, “How do medical students, who were previously some of the most optimistic, hard-working, over-achieving undergraduates, matriculate into a program and lose their drive to make the world a better place?” “Why are they telling us that social determinants of health matter in years one and two, but I don’t hear any of my attendings contextualizing patients’ illnesses with their social situation during my clerkships?” “Why don’t my friends care about this, even when we know social determinants of health are some of the primary drivers of illness?” “Is this just medical school, or will it change when we become attendings?”

After asking these questions for long enough, I started a graduate program in Social Science to start finding some answers. As a physician-social scientist trainee, I approached these questions with the inculcated habitus of both a medical student and a social scientist. With these lenses, I developed a study that sought to empirically evaluate how medical students make sense of their roles in addressing the social determinants of health during their medical education. My fractured disposition and dual-training were well suited for a hybrid ethnography, where I deployed both participant-observer and observer-participant roles (Schlesinger et al., 2020; Seim, 2021). I intentionally used ethnography to get closest to where medical students are negotiating their professional identities for the first time: the clerkship year (Han et al., 2015; Becker et al., 1961).

This dissertation project began with in-depth semi-structured interviews of nine third-year medical students who would travel as a group through their clerkship year. I utilized interviews to gain an understanding of where each individual had conceptualized their role in addressing the social determinants of health thus far in their education. I spent more than 500 hours of observation with this group of medical students during the 2022-2023 academic year. I spent time on the wards and in outpatient clinics with them, snuck away to find snacks with them, helped them hold a woman's leg as she birthed her first child, volunteered my arm for their first attempts at drawing blood, attended lectures with them, laughed with them, cried with them, and learned with them. I paired my observations with two hour-long focus groups at the end of every clerkship to explore themes from the clerkship and discuss what was emerging as important to them. I paired this data collection with an intentional practice of reflexivity, attuned to how my observations were shaped by my status as a medical student researching in the place where I attended medical school. This study was approved by the IRB at both Syracuse University and the medical university.

In this project, I have used a constructivist paradigm, specifically the Bourdieusian theory of social reproduction, to advance an argument that the structure of medical education as it stands inherently constrains medical students from addressing the social issues they identify in their learning environment and broader healthcare delivery system (Bourdieu, 1990, 1991; Grenfell, 2014; Brosnan, 2009, 2014). The first paper expands upon a theme that emerged early in my fieldwork: "interesting." Interesting is a ubiquitous term used in medical education and practice, often denoting unique or complex pathology that has piqued the interest of the clinical team.

However, in this study, I find that medical students use the word "interesting" in different ways than their superiors. Early in their clinical year, medical students understand that interesting is a form of currency in the clinical arena: the students who show they are interested get better evaluations from preceptors, get added to special lists for research projects, or fit in better within the clinical team. I argue this "interesting" currency is a form of symbolic capital, which the medical students strive to collect as they develop and deploy practices to show their preceptors they are interested: ask questions even though they don't have them, dishonestly share they are interested in the specialty they are rotating on, or attend as many procedures as possible.

However, the medical students also deploy the word interesting in ways that have not been reported in the literature. In this study, the medical students extensively use the word "interesting" to capture the morally fraught and oppressive social conditions that shape their learning environment. I argue this slippage of interesting is a form of symbolic violence that conceals and thus reproduces inequitable power dynamics in medical education and practice. The students notice the oppressive systems and imbalance of power around them, but they do not describe it as such, rather they sum it up as "interesting." These findings provide novel insights into the paucity of extra-clinical language in medical education and strengthen the calls for the development of a language of structure in medical education to meet the academic medicine's aim to train physicians that both acknowledge and address the social and structural drivers of health (Metzl and Hansen, 2014).

In the second paper, I engage the medical education literature around professional identity formation and offer an analytical turn towards social reproduction. I use the medical student

habitus to demonstrate that the professional value of social justice is incompatible with the professional dispositions inculcated within medical school, namely a guiding principle of "don't rock the boat." The students developed practices like not reporting problematic behaviors in their learning environment to avoid "ruffling feathers," in order to secure good evaluations from their preceptors. The students acknowledge they are playing the "game" of medical education and embedded in the rules is the perceived sense that speaking up against the status quo is inherently unsafe for medical students. The medical students communicate their regrets about this, but despite their best intentions, they resign themselves to the game.

Therefore, despite medical students' hopes to behave differently as physicians, they deem speaking truth to power as "not feasible," unless all power dynamics are flattened. Moreover, the medical student habitus emerged as a useful tool to understand the driving forces of social reproduction, despite curricular efforts to cultivate a physician professional identity that addresses inequality and bias, which inherently requires critique of the status quo. These findings strengthen the calls to transform the medical education learning environment from hierarchy towards solidarity to align the medical field's professed professional value of social justice with the constrained realities of medical students (ABIM, 2005; LCME, 2022).

In the third paper, I describe the process whereby the medical student research participants in this paper became research collaborators, feeding me what they called "good data" throughout the year. However, the medical students often distrust their observations, which I conceptualize as structural gaslighting. Yet, there is evidence in this study that the scaffolding of ethnographies of medical education that intentionally incorporate participatory action research principles has the

potential to empower medical students with the skills and tools necessary to examine their learning environment and socialization process to become active contributors to health justice. Together, with the evidence of organic participatory action research by medical students in their medical school learning environment, I argue for a move beyond the classic debate of a sociology of medicine or a sociology in medicine towards a sociology by medicine (Vinson, 2023).

Overall, this dissertation project shows that medical students are noticing the inefficient, the illogical, and the inequitable. However, even though they notice, they quickly back down, smoothing the edges with the word interesting. Moreover, they understand that getting through medical school is a game of “don’t rock the boat,” which prevents them from acting on their critiques of their learning environment and the healthcare delivery system. However, there was evidence from my project that students were comfortable acting on their observations within the research framework, as they fed me “good data” throughout the year. Therefore, the problem of medical education in this context was not about knowledge, it was about action. The hierarchical learning environment and the ultimate power that superiors have over medical students in their move to the next phase of their careers are the primary deterrents for medical students to meaningfully address the biases they observe during their training. Therefore, I argue system transformation from hierarchy to solidarity is required for medical students to meaningfully actualize the LCME (2022) standards that they address bias in themselves, others, and in the healthcare delivery system.

This dissertation project is inherently limited by its size. In order to deeply understand how medical students were making sense of their roles in addressing the social determinants of health, I traded breadth for depth. And with a small sample size, I intentionally varied personal identifiers to maintain anonymity of the medical student participants in this study as best as possible. Therefore, this project is unable to say anything about how demographics or other personal characteristics shape professional identity around addressing the social determinants. This study also occurred at a single institution, which limits its generalizability.

Though medical education is largely uniform in the United States and this site was fully accredited by the LCME, larger, multi-institutional studies replicating this dissertation project are critical next steps to support the transformation of medical education required to its aims with its outcomes. Moreover, international medical schools may also provide evidence on how different socio-political contexts shape medical students' professional identity around these topics. Notably, focus groups, which intentionally incorporate dialogic principles, can improve solidarity in medical education while also elucidating this process, offering a short-term solution while collecting data for a long-term transformation. Interdisciplinary teams and mixed methods should be used to gain a more robust understanding of how, where, and when to intervene in medical training to align the educational environment and medical student habitus with the medical field's proclaimed professional tenets.

Moreover, exploring why some medical students are resistant to the game of medical education and continue to speak truth to power despite their precarity may provide important insight into what interventions are necessary to cultivate an alternative medical student habitus. This study

also aligns with evidence that the medical student habitus is shaped prior to matriculation into medical school, which calls for an expansion of this study beyond the third-year of medical school and into undergraduate and pre-clinical coursework (Metzl & Petty, 2017). There is also a dearth of professional identity formation literature beyond training, which should also be interrogated because most of one's career is spent after training (Vinson, 2023).

Concretely, this study calls for more robust training in extra-clinical language of structure, which is one of the five core competencies of structural competency (Metzl and Hansen 2014). Metzl and Hansen (2014) highlight how research increasingly implicates the social determinants of health, but rarely names upstream structural drivers like racism or social hierarchies. They call for an expansion of the medical canon to include medical anthropology, medical sociology, architecture, urban planning, geography, and economics to link health inequalities that physicians treat every day with their upstream social drivers. Therefore, there is a critical need to increase interdisciplinary social science curricular presence in medical education (White & Greene 2024).

However, Bourdieu maintains that the raising of conscious is not sufficient in retraining a habitus (Grenfell, 2014). Instead, he argues for a form of counter-training which prioritizes repetitive action to inculcate a new habitus (Burawoy, 2012). Therefore, creating more spaces for medical students to act on social structures and the social determinants of health during their training is an important and actionable step for medical education curricular developers. Participatory action research and community-engaged learning are two well-studied interventions that are currently under-utilized in medical education. To further understand the potential of the

physician-social science fractured habitus and its propensity for action, scholars should turn to study the growing cadre of MD/PhD Social Science trainees (Schlesinger et al., 2020).

Yet, these interventions cannot occur without addressing the power imbalances embedded within medical education. And as a field, we must acknowledge "the master's tools will never dismantle the master's house" (Lorde, 2018). The field of medical education is limited in its disciplinary breadth, despite its claim of interdisciplinarity (Albert et al., 2020). A 2017 citation analysis of 1412 references from articles published in the top five Medical Education found that the field draws predominantly from Applied Health Research (41%) and Medical Education research (40%). Albert et al. (2020) poignantly ask,

> If education is a multifaceted phenomenon, how can it be comprehensively studied if researchers draw on a relatively narrow range of knowledge sources, methods, and approaches? Specifically, how can the sociological, psychological, political, cultural, and historical dimensions embedded in the practice of education be studied and understood, without substantive inputs from the academic disciplines focusing on understanding these aspects (p. 1251).

Therefore, if medical education heeds the call to increase social science principles in its curricula, medical education research must also partner with interdisciplinary scholars in the social sciences and humanities to study and address the structures that uphold oppressive power dynamics that define medical students' experience of their training.

Moreover, immediate strategies to alleviate some of the power imbalance driving a medical student habitus guided by "don't rock the boat" include developing spaces where medical

students can meaningfully and safely address their grievances. From this study, anonymity is not enough. For residents, unions have provided trainees with collective bargaining power to redefine their working conditions to improve patient safety and personal well-being (Reinhart, 2023). However, these contracts do not extend to medical students. Currently, medical students need both spaces and a process to transform their concerns into solutions. Medical students and medical school administrators should consider outside personnel to facilitate this process given the real fear of retaliation that governs medical student behaviors and constrains critique.

Immediately, more attention and research need to explore alternative forms of evaluation that reduce the entrenched medical hierarchy and power that preceptors hold over students. Throughout the year, evaluations were the primary roadblock for students to speak up against the status quo. Therefore, evaluations must be engaged as tool of social reproduction and an obstacle to training medical students who act upon the social determinants of health and health inequities. Formative evaluations by preceptors who do not have grading privileges is a reasonable solution to measure medical students' clinical competency development while also addressing the power imbalance. Moreover, more meaningfully engaging patients as evaluators is another intervention to consider. This strategy addresses the current evaluation system which drives the medical student habitus to value the preceptor's evaluation of care over the patient's.

Overall, this project set out to provide some answers about how we might build a medical school learning environment that actualizes the professional tenet and accreditation mandate that medical students learn to identify and address health inequities. When I talk to medical school colleagues about this dissertation project, these findings deeply resonate with them. They often

summarize: “so you’re studying the hidden curriculum?” I hope this work inspires the continued excavation of the hidden curriculum and its role in social reproduction, which has held up a medical education system summarized as “reform without change.” Moreover, I hope this dissertation transforms the conceptualization of the hidden curriculum as unprofessional undertow of medical education to a systemic feature of medical education that perpetuates inequity. I hope this dissertation project is a methodological case study for medical school curriculum developers to understand how social science research can be strengthened by the medical student skillset and how medical students can use social science research to improve their learning environment and health delivery. Finally, I hope the findings in this study contribute to a knowledge base closer to the experiences of medical students today and are utilized to cultivate a learning environment that enables them, their patients, and their communities to flourish rather than fear. If there are any questions about the future of medical education, this dissertation project suggests that medical students have some answers.

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EDUCATION

2020- present	**Syracuse University, Maxwell School of Citizenship and Public Affairs,** Syracuse, New York **Social Science Ph.D. Candidate,** anticipated May 2024 Phi Kappa Phi, University Fellow, GPA 4.0
2016- present	**State University of New York, Upstate Medical University, Norton College of Medicine,** Syracuse, New York **M.D./M.P.H. Candidate,** anticipated May 2024 AOA, Gold Humanism, USMLE Step 1: 235, USMLE Step 2 CK: 268
2012-2016	**Hobart and William Smith Colleges,** Geneva, NY **Bachelor of Science, Biology** **Bachelor of Arts, Health Disparities** Dean's List, Magna Cum Laude, Hai Timiai Honor Society, GPA 3.75

PUBLICATIONS

September 2023	**Connolly, H**. (2023). "They're training us to be helpless:" Medical student Socialization around social determinants of health. *SSM-Qualitative Research in Health*, *4*, 100327. https://doi.org/10.1016/j.ssmqr.2023.100327
September 2023	A. Chatterjee, L. Chin, **H. Connolly**, J. Dutterer, C. Mouton, A. Steinecke, M. Schuster. Median Length of Tenure of U.S. Medical School Deans 1959 – 2018. September 2023. *In Review.*
August 2023	**H. Connolly**, K. Howe, L. Cleary. Pushing Upstream: A Call to Action from Elizabeth Blackwell, MD. August 2023. *In review.*
July 2023	R. Proumen, **H. Connolly**, N. Debick, R. Hopkins. Assessing the accuracy of electronic health record gender identity and REaL data at an academic medical center. *BMC Health Services Research.* 2023:23(884). https://doi.org/10.1186/s12913-023-09825-6
December 2022	**H. Connolly**, A. Caruso Brown. "Checking Back in on the Bias Checklist." National Collaborative for Education to Address the Social Determinants of Health. December 2022. https://sdoheducation.org/community-hub/checking-back-in-on-the-bias-checklist/
January 2022	L. Ongeri, D. Larsen, R. Jenkins, A. Shaw, **H. Connolly**, J. Lyon, S. Kariuki, B. Penninx, C. Newton, P. Sifuna, B. Ogutu. Community suicide

	rates and related factors within a surveillance platform in Western Kenya. *BMC Psychiatry*. 2022:7(22).
February 2012	**H. Connolly**. Shall We Gather at the River. Thousand Islands Life Magazine. https://tilife.org/BackIssues/Archive/tabid/393/articleType/ArticleView/articleId/841/ldquoShall-We-Gather-at-the-Riverrdquo-by-Hannah-Connolly.html

ORAL PRESENTATIONS

March 2024	**H. Connolly.** Medical School has an "Interesting" Problem: Language and Social Reproduction in Medical Education. Charles R. Ross Memorial Student Research Day. Syracuse, NY.
August 2023	**H. Connolly.** Sociology of Health Professions Education in Action Panel. American Sociological Association Annual Conference. Philadelphia, Pennsylvania.
March 2023	**H. Connolly.** White Coat Talk: The Culture of Invulnerability in Medical Education. Alden March Bioethics Institute Annual Medical Student Ethics Conference. Albany, New York. Virtual.
February 2023	**H. Connolly.** "They're Training us to be Helpless:" Medical Student Professional Identify Formation. Eastern Sociological Society Annual Conference. Baltimore, Maryland.
April 2022	**H. Connolly**. The Shaping of In/vulnerability in Medical Education. Conference for Physician-Scholars in the Social Sciences and Humanities. Los Angeles, California.
March 2021	Sous W, Lupone C, Germain L, Caruso Brown A, Cronkright P, Hobson E, **Connolly H**, Shaw A. Global health in primary care: A clinical education intervention addressing resident perceptions of refugee care. Consortium of Universities for Global Health Annual Meeting. 12-14 March 2021. Virtual.
Fall 2020	**H. Connolly.** Fibromyalgia Syndrome Treatment: A Review from a Psychiatric Perspective. New York Pain Society Trainee Poster Competition. Virtual.

POSTER PRESENTATIONS

September 2023	**H. Connolly**. "You're not going to get any social justice today:" Professional Identity Formation in Preclinical Medical Education. AAMC Learn Serve Lead 2023. Seattle, Washington.

April 2022 — **H. Connolly.** The Medical School Learning Environment and Burnout: Moving Wellness Upstream in Medical Education. Charles R. Ross Memorial Student Research Day, Syracuse, NY.

April 2022 — N. Onwumere, R. Schulman, D. Pitter, **H. Connolly**. Anonymity in Medical Ethics Discussions to Increase Student Engagement: A Feasibility Study. Charles R. Ross Memorial Student Research Day, Syracuse, NY.

November 2021 — **H. Connolly.** Epistemic Vulnerability: Bridging health equity curricula to intervention. Bridging Cultures to Defeat COVID-19 Conference. Syracuse, NY. Virtual.

March 2019 — **H. Connolly,** I. Ogolla, L. Atieno, P. Musoke, J. Turan, M. Onono, L. Abuogi. Early lessons learned from pilot implementation of a social autopsy tool to explore factors related to perinatal mortality among HIV positive and negative pregnant women in southwestern Kenya. Charles R. Ross Memorial Student Research Day, Syracuse, NY.

RESEARCH EXPERIENCE

July 2022-present — **Research Assistant, AAMC Committee of Deans, Dean Tenure Subgroup**
Responsible for literature review, writing, and submission to academic journal for medical school dean tenure update

Jul 2019- March 2020 — **Student Researcher, SUNY Upstate Center for Global Health and Translational Science, Kisumu, Kenya**
Drive development of program which trains and empowers community health workers in rural Kenya to screen and refer for basic mental health conditions
Support creation and management of database of suicide-related verbal autopsies, analyze open histories, perform data analysis, prepare manuscript
Support SUNY Upstate faculty and residents doing month-long rotations in Kisumu

Jun-Aug 2017 — **Student Researcher, UCSF Student Education and Training Program, Kisumu, Kenya**
Conducted a pilot study using a social autopsy tool to elucidate social determinants of perinatal mortality in rural Kenya

LEADERSHIP EXPERIENCE

January 2024 — **Associate Dean of Medical Education Search Committee, Student Representative,** SUNY Upstate Medical University, Syracuse, NY
Invited by Dean of College of Medicine to serve as student representative

August 2023- present **Ob-Gyn Chair Search Committee, Student Representative,** SUNY Upstate Medical University, Syracuse, NY
Invited by Dean of College of Medicine to serve as student representative

Feb 2022-2024 **Dean's Curriculum Revision Executive Committee, Student Representative,** SUNY Upstate Medical University, Syracuse, NY
Selected as only student representative to oversee curricular revision, weekly meetings
Recruited and organized student feedback mechanism for curriculum working groups
Supported curriculum revision elective for medical students to provide feedback on preclinical content
https://youtu.be/IsZge026RRA

Summer 2022-present **REMEDYS Working Group,** UCLA, Virtual
Invited participant to interdisciplinary, cross-institutional collaborative to increase uptake of social science content into medical education

Jan 2021-Feb 2022 **Curriculum Renovation Steering Committee, Student Representative,** SUNY Upstate Medical University, Syracuse, NY
Selected as only student representative, report directly to the dean, weekly meetings
Tasked with developing new curriculum for medical school including new 3-year pathway, early integrated clinical experiences, new Health Systems Science curriculum with community engagement requirement

March 2021-present **Curriculum Renovation, Health Systems Science Working Group, Student Representative,** SUNY Upstate Medical University, Syracuse, NY
Ethics, Equity, and Professionalism subgroup, biweekly meetings to develop one-week intensive
Law and Advocacy subgroup, biweekly meetings to develop one-week intensive

March 2021-
June 2022 **Curriculum Renovation, Longitudinal Clinical Skills Working Group, Student Representative,** SUNY Upstate Medical University, Syracuse, NY
Developed new core course for MS1/MS2 curriculum that integrates early clinical experiences and community engagement

September 2020-2021 **Diversity Task Force, Implementation and Oversight Tiger Team, Education and Training Team, Student Representative,** SUNY Upstate Medical University, Syracuse, NY
Evaluate, prioritize, develop, and coordinate action items from Diversity Task Force report

Fall 2020	**DEI and Simulation Learning, Working Group, Student Representative,** SUNY Upstate Medical University, Syracuse, NY Engaged with issues around diversity of standardized patient experiences and simulation technology
Fall 2020	**Race and Ethnicity Dialogue Group,** Maxwell College, Syracuse University Engaged in weekly 3-hour dialogue in an interdisciplinary group around race and ethnicity in the academy
June 2020-2021	**Alpha Omega Alpha, Gamma Chapter, Diversity and Inclusion subcommittee member,** SUNY Upstate Medical University, Syracuse, NY Responsible for evaluating eligibility and election criteria and proposing new criteria in alignment with broader SUNY Upstate mission to promote culture of belonging
April 2020-2021	**Alpha Omega Alpha, Gamma Chapter, Co-Chair of Leadership,** SUNY Upstate Medical University, Syracuse, NY Developed a credit-bearing Leadership in Medicine Elective for medical students
Jan-May 2019	**William Smith College Division III Women's Lacrosse Assistant Coach,** Hobart and William Smith Colleges, Geneva, NY Awarded Liberty League Coaching Staff of the Year Attend practice daily, travel with team to games, assist in creating practice plans, manage stations, and provide mentorship for student athletes while completing my rural medicine rotations nearby in Newark, NY
Sep 2018-2019	**Cultural Sensitivity in Medical Education Working Group, MS3 Representative**, SUNY Upstate Medical University, Syracuse, NY Attend focus group discussions on incorporating cultural competency into medical school curriculum
Aug 2018-2019	**Curriculum Committee**, **MS3 Representative,** SUNY Upstate Medical University, Syracuse, NY Attend monthly meetings on drafting new medical school curriculum, provide input and feedback on clinical year experience
Aug 2016-2018	**Interprofessional Education Core Committee**, **College of Medicine Representative,** SUNY Upstate Medical University, Syracuse, NY Attend monthly meetings on Interprofessional Education (IPE) topics, plan IPE events for larger student body, work as representative to increase educational collaboration among nursing, physical therapy, physician assistant, and medical students

Mar 2017–Mar 2018 **Physicians for Human Rights**, **President,** SUNY Upstate Medical University, Syracuse, NY
Plan and oversee events, manage budget, facilitate executive board meetings, recruit students for membership

Mar 2017–Mar 2018 **Integrative Medicine Club, President**, SUNY Upstate Medical University, Syracuse, NY
Plan and oversee events, manage budget, facilitate executive board meetings, recruit students for membership

Jan 2017-present **Student Interviewer, Office of Admissions**, SUNY Upstate Medical University, Syracuse, NY
Student interviewer for prospective medical school students, conduct interviews, provide feedback on applicants

TEACHING EXPERIENCE

April 2024 **SUNY Upstate Physicians for Social Responsibility Course, invited lecturer**

March 2024 **SUNY Upstate MD/PhD Grand Rounds, invited lecturer**

Fall 2023 **SUNY Upstate MS1 Health Systems Science Course, invited facilitator**
Facilitate small group break-out discussions during Population Health intersession

August 2022- May 2023 **SUNY Upstate MS1 Patients to Populations, instructor**
Facilitate biweekly 3-hour case-based discussions on bioethics, health justice, and structural determinants of health to small group of 15 MS1 students

August 2022 **SUNY Upstate MS1 Longitudinal Launch Week, invited lecturer**
Introduction to Structural Competency

May 2022- September 2023 **UCSF Clinical Ethnography Working Group, Co-leader**
Responsible for planning and facilitating monthly discussions around clinical ethnography theory and practice, inviting content experts, and expanding network

February 2022 **SUNY Upstate MD/PhD Grand Rounds, invited lecturer**
Curiosity in Medicine: Data vs. Dogma

Summer 2021 **SUNY Upstate health equity curriculum renovation course, Course leader**
Led curricular renovation efforts for credit-bearing curriculum elective for

	more than 20 MS1 students, led to multiple student-led publications and presentations
Summer 2021	**Teaching for Basic Scientists, invited lecturer,** SUNY Upstate Medical University Co-taught lecture on implicit bias and social determinants of health for basic science PhD students
2020-2021	**Future Professoriate Program,** Syracuse University Structured professional development experience for aspiring faculty,
April 2020-2021	**Leadership in Medicine, Course co-developer,** SUNY Upstate Medical University Developed credit-bearing elective for medical students around leadership theory and practice, created sessions centered around community and healthcare leadership
2020	**Alpha Omega Alpha Honor Society Tutoring**, SUNY Upstate Medical University, Syracuse, NY Co-create individualized study plans and support content mastery

SERVICE EXPERIENCE

Aug 2016–Jun 2019	**Rural Medicine Program,** SUNY Upstate Medical University, Syracuse, NY Admitted into curriculum with primary focus on primary care for underserved rural populations; completed 5 months of clinical rotations at rural placement in Newark, NY; mentored high school students around health profession topics
Aug 2016-May 2018	**Peds Pals,** Center for Civic Engagement, Syracuse, NY Intensive service experience, pairs a Pediatric Hematology/Oncology patient with two medical students who have weekly 4-hour home visits with "little pal" providing social support and academic tutoring
Jan-Dec 2018	**Refugee Health Elective,** SUNY Upstate Medical University, Syracuse, NY Attend weekly home visits with newly settled refugee family to facilitate navigating healthcare, social services, education, and overall integration into Syracuse community
Aug 2016–May 2017	**MIRACLE Elective**, SUNY Upstate Medical University, Syracuse, NY Paired with expectant mother during third trimester and extended to first year of life, attended prenatal and postnatal visits, provided social support and healthcare advocacy

AWARDS & HONORS

March 2024	**SUNY Chancellor's Award for Student Excellence** Highest honor bestowed upon a student by the State University of New York
March 2024	**American Medical Women's Association Glasgow-Rubin Acheivement Citation** Awarded to women who graduate in the top ten percent of their graduating medical school class
March 2024	**Phi Kappa Phi Honor Society**, Syracuse University Highest all-discipline academic honor society, top 10% of graduate students invited
2022	**Roscoe Martin Fund for Graduate Research,** Syracuse University Merit-based dissertation scholarship
2022	**Graduate School Summer Pre-dissertation Fellowship**, Syracuse University Merit-based pre-dissertation fellowship
2021	**University Fellowship,** Syracuse University Most prestigious merit-based scholarship for graduate students at Syracuse University
2019	**Alpha Omega Alpha Honor Society, Gamma Chapter,** SUNY Upstate Medical University Highest Academic Medical Honor Society, top 10% of class eligible for election
2019	**Gold Humanism Honor Society**, SUNY Upstate Medical University Nominated and selected by peers as a student that has "demonstrated excellence in clinical care, leadership, compassion and dedication to service," open to 15% of the class
2019	**Benjamin H. Kean Fellowship**, American Society of Tropical Medicine & Hygiene Awarded to support medical students involved in clinical or research electives in tropical areas to encourage work in tropical medicine and recognize achievements to date
2019	**Leanne & Frank E. Young, MD '56 Endowed Scholarship**, SUNY Upstate Medical University Awarded to student in the top 10% of their class who is interested in pursuing Academic Medicine

2019	**Peggy and Adolph Morlang, MD '66 Scholarship,** SUNY Upstate Medical University Awarded to student in the top 50% of their class that plans to work or study abroad, preferably in a disadvantaged society
2019	**Dean's Letter of Commendation,** SUNY Upstate Medical University
2017, 2018	**Student Citizen Award**, SUNY Upstate Medical University Awarded to students who have distinguished themselves as leaders and volunteers in the life of the Upstate community and the greater Syracuse area
2017	**Paul Harris Fellow**, The Rotary Club of Watertown, NY Awarded in appreciation of tangible and significant assistance given for the furtherance of better understanding and friendly relations among peoples of the world, acknowledged for work in Kisumu, Kenya
2016	**Hai Timiai Honor Society**, Hobart and William Smith Colleges One of eight William Smith women inducted into highest senior honor society
2016	**Winn Seeley Award**, Hobart and William Smith Colleges Highest honor awarded to one senior William Smith student-athlete for achievement in service, athletics, and academics

PROFESSIONAL MEMBERSHIPS

2023	American Sociological Society
2021	American Medical Association
2021	American Psychiatry Association
2021	Physicians for Social Responsibility