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How students experience and navigate transitions in undergraduate medical education: an application of Bourdieu's theoretical model

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Abstract Using Bourdieu's theoretical model as a lens for analysis, we sought to understand how students experience the undergraduate medical education (UME) milieu, focusing on how they navigate transitions from the preclinical phase, to the major clinical year (MCY), and to the preparation for residency phase. Twenty-two medical students participated in this longitudinal case study. Students had similar preclinical and post-MCY experiences but different MCY experiences (rotational vs. longitudinal tracks). We interviewed students every 6 months in the preclinical phase, mid-way through MCY, and 7–8 months before graduation (101 total interviews). We inductively created codes, iteratively revised codes to best-fit the data, and thematically clustered codes into Bourdieu-informed categories: *field* (social structures), *capital* (resources) and *habitus* (dispositions). We found that students acclimated to shifts in the UME field as they moved through medical school: from medical school itself to the health system and back. To successfully navigate transitions, students learned to secure capital as medical knowledge and social connections in the preclinical and preparation for residency phases, and as reputable patient care and being noticed in the clinical phase. To obtain capital, and be well-positioned for the next phase of training, students consistently relied on dispositions of initiative and flexibility. In summary, students experience the complex context of medical school through a series of transitions. Efforts to improve UME would be well-served by greater awareness of the social structures (field) that students encounter, the resources to which they afford value (capital), and the dispositions which aid acquisition of these resources (habitus).

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Introduction

Undergraduate medical education (UME) is often described as a journey. But rather than a seamless trajectory, this journey may best be conceived as a series of transitions between phases of the journey. Students experience and navigate these transitions in an increasingly complex and unstable context. For example, medical school reform is increasingly common, and medical education is ever more competitive due to growing medical school classes without parallel growth in residency positions (Anderson and Kanter 2010; Association of American Medical Colleges 2014; O'Brien and Irby 2013). At the same time, the health system in which students train is increasingly obliged to improve the quality of patient care, and to do so cost-effectively and without compromising their education or research missions (Grumbach et al. 2014; Ludmerer 1999). This labyrinthian context serves as a reminder that learning does not occur in a social vacuum. Rather, medical students encounter and navigate many socially intricate passageways as they transition from the preclinical phase of medical school, to the clinical phase, and on to the preparation for residency phase.

The theoretical model of social scientist Pierre Bourdieu provides a useful lens for understanding how individuals (such as UME students) are shaped by and, simultaneously, are shaping their social contexts (such as the UME milieus). Specifically, Bourdieu's Theory of Practice (1977) offers the concepts of field, capital, and habitus to inform analysis of the mutual influence between the social and the individual. Social structures (fields) can be understood as spaces wherein social agents, e.g., individuals with unique dispositions (habitus), interact and vie for resources (capital) to increase their standing in the field (Bourdieu 1977; Bourdieu and Wacquant 1992). Field, capital, and habitus are not static, but evolving and functioning fully on in relation to another. Applying Bourdieu's model to UME, medical students must quickly acclimate to the social space of UME (i.e., field), understand the resources and social positions that are accorded value (i.e., capital) in UME, and rely on their subconscious dispositions (i.e., habitus) to gain those resources and social standing (Varpio 2013). In so doing, the students simultaneously reinforce the structure (i.e., the arrangement of the field and of the capital valued therein) and the practices valued therein (i.e., rewarding specific kinds of habitus). Students learn about field, capital, and habitus as each concept evolves and influences the others, and they do so without being explicitly taught.

Bourdieu brings a unique perspective to social science applications in medical education research. Like classical Marxism and other critical social theories, Bourdieu's theoretical model addresses dynamics of power in society and may act as a catalyst for social transformation (Brookfield 2005). His Theory of Practice straddles aspects of social life and points of view that social science has traditionally "torn asunder": the material/physical versus symbolic/mental, external structure versus internal agency, and a theoretical/distant versus practical/involved investigator stance (Brubaker 1985). By refusing to split these aspects of social life and points of view, Bourdieu may be considered more sociological than strictly psychological or political. Nonetheless, Bourdieu submits that his proposed interplay fulfills important political functions (Bourdieu and Wacquant 1992).

Using Bourdieu's Theory of Practice as a lens through which to examine the transitions experienced by UME students allows us to analyze how different aspects of social life shape these experiences. For instance, Bourdieu's concepts support examining how external structures such as residency competition processes inform, and regulate, the actions and agency of medical students.

As part of an effort to examine and understand curricular changes at Columbia University's College of Physicians and Surgeons, we conducted a 4-year, longitudinal case study involving 22 medical students. Consistent with case study methodology (Merriam 1998), the case was delineated by time (the class of 2010–2014), place (Columbia University's College of Physicians and Surgeons) and activity (progressing through medical school). Data derived from in-depth interviews informed our over-arching research question: How are students shaped by their experiences of the complex UME milieu, especially as they navigate the transitions from one phase of UME to the next?

Methods

Our study consisted of medical students who entered medical school in 2010 and would graduate in 2014. Participating students experienced a similar preclinical curriculum at Columbia University's College of Physicians and Surgeons, with the exception of monthly didactic sessions that were part of a formal health systems curriculum for a subset of students. Thereafter, a large cohort of students spent their major clinical year (MCY) in Columbia's traditional, rotation-based track in New York City and surrounding communities (hereafter referred to as the rotational track). Another much smaller cohort spent their MCY in a longitudinal track at a single rural setting, where the curriculum included formal health systems training (hereafter referred to as the longitudinal track). This was the first group of students in the longitudinal track; we were aware of contextual differences (urban vs. rural) but did not have expectations that how they experienced transitions in medical school would differ. Students in the longitudinal track returned to Columbia for their sub-internships, and most stayed on Columbia's New York City campus for the remainder of medical school.

In September 2010, DB and BR invited students to participate in this study: nine of ten students in the longitudinal track and 14 of 150 in the rotational track accepted. One student in the rotational track dropped out after the first interview. The Institutional Review Board at Columbia University approved the study.

The interview guide consisted of three main questions, asking about (a) peak experiences in specific UME phases, (b) lessons learned about what it takes to be a physician in today's society, and (c) lessons about health systems. DB interviewed students at five time points: at the end of the first semester (November–December 2010), at the end of the first year (April–May 2011), at the end of the preclinical phase (November–December 2011), mid-way through their major clinical year (June 2012), and again 7–8 months before graduation (September–November 2013).

DB and BR were colleagues in Columbia University's Center for Education Research and Evaluation; they had neither a direct role in teaching nor evaluating medial students. DB conducted all of the interviews and routinely conferred with BR. All interviews ($n = 101$) audio-taped, transcribed verbatim, and managed data with ATLAS.ti 7 (Scientific Software Development, 2012). DB inductively created codes and, according to principles of constant-comparative methods, iteratively revised codes to best-fit incoming data (Charmaz 2006; Miles and Huberman 1994). DB and BR invited LV to join the

research team as an expert consultant, and with her input, thematically clustered codes into theory-informed categories.

As checks on trustworthiness, we drafted an abstract and solicited feedback from students who participated in the study prior to graduation in May 2014. We sought critical review of their work from an expert in medical sociology and from two senior medical educators at Columbia University's College of Physicians and Surgeons in September 2014.

Findings with summative discussion by phase

We organized our findings chronologically, reflecting how students encountered change as they progressed through medical school. The 18-month preclinical phase was largely classroom-based, supplemented with early clinical exposure. The 12-month MCY comprised the clinical phase; the remaining 14 months of electives and required scholarly work comprised the preparation for residency phase. We provide illustrative quotes, identified by student number and track.

Pre-clinical phase: findings

Students entered the UME field and experienced an intense preclinical curriculum. They described learning volumes of medical science, or as one student said, "a mountain of knowledge that I am going to be picking away at for the rest of my life" [#12, rotational]. Despite the challenge ahead, students expressed positive regard for their preclinical experience and talked about a supportive learning environment that fostered collaborative peer relationships. In this phase where grades were pass/fail, students perceived themselves as all on the same side, or as the student below implied, as *teammates*.

> I think overall, we are clever enough and really engaged students, and the teamwork aspect is also a contributing factor. I have a study group with four people, and we meet frequently. That really helps cement our knowledge as we take turns teaching each other. [#17, rotational]

Students frequently described their experience in Columbia's diverse extra curriculum (e.g., volunteering in student-run medical clinics). Their extracurricular involvement increased when they realized that clinical exposure could be a valuable resource as they transitioned into the next phase of their training, even if exposure was simply shadowing.

> I've been shadowing one of the plastic surgeons and I really think it is fascinating … At first I wasn't sure about missing class just to shadow, but it was so much better than class. [#21, rotational]

Early in the preclinical phase, students experienced another component of the UME field: the larger health system that UME was preparing them to work within. As fledgling physicians, students wore the white coats of a doctor. And although students were not fully immersed in the health system, early exposure started to change their perceptions of the system and of themselves as physicians. For instance, one student talked about being treated differently by patients.

> I think Columbia gets us into the hospital to see patients and to learn how to wear a white coat. You still feel like you don't know anything, so it can turn into a

> shadowing experience where you're not doing much. But it does change the way you look at the health system and the way you feel treated by the patients because now they see you as a doctor. [#18, longitudinal]

In the preclinical phase, students were oriented toward acquiring capital in the form of medical knowledge. Students understood that grades mattered, but what they really valued was the application of medical knowledge.

> We're not just learning this stuff in class for the sake of taking the boards, doing well on those, and getting a good residency. We're learning this stuff to put it into practice, figure out what's going on with patients, and ask the right questions. [#16, longitudinal]

The capital of acquiring and applying medical knowledge mattered because it signaled their development as physicians. The student quoted below made a critical distinction between academic proficiency (i.e., the acquisition of knowledge), and clinical proficiency (i.e., using that knowledge in the care of patients).

> Its the transition from being purely a student, somebody who is academically proficient to somebody who can make use of it in a practical context. What good is it if somebody needs your help at a certain moment but you know nothing that you can actually offer that person and have to refer to a textbook? At some point you really have to be able to put things together. I think the progression from student to clinician largely involves being able to integrate things. [#8, rotational]

Students also sought capital in the form of relationships with physician role models who held coveted positions. By "opening doors", these relationships helped secure capital for the future. And, as the student quoted below suggests, learning how to secure capital was more inculcated than taught.

> I think it's a philosophical foundation of this medical school; it's just part of the culture here, where doctors are like, 'You want to shadow me? Just e-mail me. You want to come to the cath lab? Just e-mail me'. It feels like you're almost colleagues. Its just like, 'You want to do this? The doors are open.' [#1, rotational]

While every student entered the UME field with their own set of dispositions, initiative was a disposition that students regularly relied upon, both unconsciously and consciously. Students consistently said that taking initiative and being actively involved in both curricular and extra-curricular events was "very much a Columbia attitude" [#10, longitudinal]. The disposition of initiative was both inherent and acquired. Although some students described themselves as ambitious by nature, suggesting that this disposition was part of their personal habitus, others talked about learning to put themselves out there to make a positive impression.

> The biggest difficulty you run up against is that people don't take you as seriously as you need them to, or you don't get people's attention in a positive way. Feeling more competent will go a long way towards projecting an attitude. If you feel like you belong there, other people will maybe feel the same way, as long as you're not glaringly incompetent. [#14, rotational]

Another element of habitus was flexibility: staying open to new knowledge and new ways of doing medicine. Students often reported a reliance on flexibility as an attitude that

would serve them well as they transitioned to the clinical phase. One student appreciated the importance of adapting care to each patient.

> I've come to realize that you really need to adapt your approach to each patient, based on their background and what they're bringing to the patient encounter … It's not one-size-fits-all. [#3, longitudinal]

Preclinical phase: summative discussion

In the preclinical phase, medical students experienced coursework, extracurricular activities, and the health system, which together comprised the field of UME. Medical students in the preclinical phase called upon dispositions of initiative and flexibility to acquire capital that would support their success in the next phase. Some students brought these dispositions with them as part of their personal habitus; other students developed these attitudes as they learned to navigate transitions in UME.

Clinical phase: findings

When students transitioned into the clinical phase, components of the field shifted: medical school proper faded and the realities of working in a health system became more salient. One student was surprised to learn that some of what doctors do on a day-to-day basis was rather mundane.

> I'm amazed at how much isn't medicine, but rather helping people with the social aspects. I didn't expect that. I thought doctors did research and talked about different diagnoses. But mostly they have a good idea for what the patient has and what should be done. It's just a matter of getting everything in order, and coordinating is a pain in the neck: the insurance issues, outpatient management, and the follow-up after discharge. [#11, rotational]

Recall that students experienced the health system in two different contexts during this clinical phase. Students in the longitudinal track had a year-long, more homogenous experience in a smaller, less stressful, community-like structure, one in which they felt cared for as they learned the basics of clinical practice. This context afforded these students opportunities to follow patients over time and considerable exposure to outpatient medicine. In contrast, students in the rotational track had a more heterogeneous set of relatively brief experiences (1–6 weeks) in an urban, academic medical center and its affiliate clinical sites. These students described a more intense, hierarchical structure, characteristic of academic medicine. This context afforded these students opportunities to learn about a wide range of diseases while caring for a diverse, acutely ill patient population in a variety of settings.

One type of capital was paramount for students in the longitudinal and rotational tracks: having a reputation for providing excellent care. This reputation was afforded value because students were genuinely interested in becoming excellent clinicians and because it impacted grades. No longer pass/fail and closer to residency, grades mattered. Students in the less stressful context and longitudinal track were relatively unencumbered in their acquisition of this capital. Looking back on her MCY experience, one student in this track said, "We focused on learning the basics and learning medicine. And we didn't have to worry about much else" [#16, longitudinal]. Conversely, students in the rotational track had to juggle acquisition of this form of capital (i.e., providing reputable patient care), with

acquisition of another form of capital: being noticed in the medical hierarchy. One student in the rotational track attributed a peak learning experience, in part, to passing the critical inspection of her resident assessors.

> I was on my Medicine rotation with residents who fully embraced me as a teammate. I'd volunteer to go to the blood draw, to go to the lab, to run for anything. Anything they needed, I was there. They recognized that I wanted to work hard and that I wanted the best for the team so they took me on and taught me so much … And they wrote me great evaluation at the end of the rotation [#20, rotational]

Consistent with the preclinical phase, students regularly relied on the disposition of initiative in the clinical phase. But while students in the longitudinal track talked about taking initiative in managing their own learning, students in the rotational track talked about taking initiative in order to be noticed. One student recalled this fruitful lesson about initiative-taking.

> On my last rotation, I got a lot of negative feedback from my preceptor. She was like, "You need to take more initiative because that is what's going to distinguish an honor student from high pass student." She gave me a lecture on how she notices differences between male and female students and how there's a lot of timidness and not taking initiative. I was like, "Oh my god, this is terrible. She thinks I am timid and I don't have what it takes to impress her." But I went in the next day and I was like, "I'm going do something about this." I went all out and was bold with everything I did. [#6, rotational]

Feedback from faculty taught this student about securing capital, in this case, the capital of being noticed. But most times, students implicitly learned how to navigate transitions without being explicitly taught. And failure to navigate transitions did not portend well for the next phase.

> People have high expectations in medical school, particularly in MCY. Sometimes they don't tell you their expectations, and you have to figure it out yourself. It's interesting to see how some of us respond. Some of my classmates are really flourishing and some are not so much because they're frustrated by not being told what's expected. We've always been students, we've always been told what's going to be on the exam, what we're expected to know in class, what problems we're expected to turn in. Now we're transitioning to this new world where we have to come up with our own expectations of ourselves. How well we are able to do that determines how successful we become. Nobody's ever pointed out to us that that's a transition that happens. I think that's sort of the shocker of MCY: nobody's going to tell you to do these things, but in their evaluation of you, they're going to write down that you didn't do these things. [#21, rotational]

Just as the disposition to take initiative transferred from the preclinical to clinical phase, so too did flexibility. Students relied on being open to new knowledge and new ways of doing medicine as they delved into patient care. For example, one student learned to partner with parents in the care of pediatric patients.

> There were a lot of times in pediatrics where parents would push back. We'd change our management, I think for the better. They were like, 'That might work in general but that won't work for our child — trust us.' We're like, 'Okay, we're listening. Let's figure out something that will work.' [#4, rotational]

Students in both tracks sought to acquire capital in the form of a reputation for providing excellent care, as this would translate to grades. However, students in the rotational track talked about the need to overcome barriers in a highly complex system in order to achieve the goal of reputable patient care. That is to say, students in the rotational track adapted to the context and relied on grit to overcome barriers to providing excellent patient care. As the student quoted below said, success in the rotational track required the ability to "work around the limitations".

> It's one of those things you don't grasp until you experience it. In class, they say in the abstract, 'We're missing so many beds, and this many people don't have insurance.' You think, 'Wow, this is terrible', but it's hard to imagine exactly how it will impact care. What's interesting is that the way it impacts care is different than what you'd expect. For example, not having insurance is not a completely limiting factor. It doesn't end care. It doesn't preclude care, but it is a frustration or a modifying factor. It makes everyone's jobs more difficult and certain patient's care suboptimal, but it's not an absolutely limiting factor. The patient is still being cared for. People work around these limitations. [#17, rotational]

Clinical phase: summative discussion

In the clinical phase, students experienced the health system component of the UME field in two different, track-dependent contexts for their MCY. All students sought to acquire capital in the form of reputable patient care, and relied on flexibility to do so. For students in the rotational track, flexibility was necessary but not sufficient: they also relied on grit. The context in which the rotational track played out was hierarchical and success in that context demanded additional capital: to be noticed. While students in both tracks relied on initiative for the sake of learning, students in the rotational track also relied on initiative for the sake of being noticed. Thus, habitus in the clinical phase reflected the triad of flexibility, grit, and initiative.

Preparation for residency phase: findings

The field of UME shifted again in the final phase of medical school: the social structure of medical school resurfaced as they began to differentiate by exploring medical and surgical specialties that interested them, and to integrate common themes such as patient safety. But this time, the field was less a supportive environment and more a competitive space within which students would vie for residency placements. Some students understood the rigor of this phase as the school's rite of passage.

> The school doesn't mollycoddle you or hold your hand or tell you that you're awesome … that's just the reputation that [medical school] has and I can understand why. But it is just an incredible clinical learning environment. The people here do really want to provide the best possible patient care. The school's a little rough, but I think going through that together with your classmates makes us kind of close… If you can make it through [medical school], you're pretty solid. I think that's part of the reason why [medical school] has a reputation for turning out solid clinicians. A little bit of that rough exterior is good for us in some ways. [#1, rotational]

Students in the longitudinal track returned to the intense, hierarchical context in New York City for clinical electives. Most described their re-integration as relatively easy because of overarching similarities.

> "The medicine is the same in both places, and both are filled with really smart people who are all working towards pretty much the same goal. Among my classmates, we are all trying to learn to become good physicians and to compete a little bit to get ourselves the residences and accolades and awards that we want." [#2, longitudinal]

Still, they consistently highlighted contextual differences in pace and competitiveness. One student noticed differences in what was accorded value, as evidenced by diverse dress codes.

> People at here [longitudinal] do surgeries to make people's lives better and I didn't necessarily feel that way at Columbia [rotational]. Which isn't to say that that's not the case, I just didn't feel it in the same way. Here [longitudinal], everyone dresses up for clinic, puts on a skirt, puts on a tie; like that's the standard. At Columbia, they dress up for academic presentations and grand rounds. And that is the cultural difference. [#9, longitudinal]

In this final phase of medical school, students recognized a need to distinguish themselves from their classmates by acquiring the capital necessary to get into residency: things like grades, letters of recommendation, and research experience. While the idea that "the more capital, the better" was generally true for all phases of UME, it was particularly true for students seeking highly competitive residencies, such as the surgical sub-specialties. And students in the longitudinal track had gained recognition—over and above the prestige of a medical degree from Columbia—simply by participating in an innovative longitudinal track with a health systems focus. One student described her experience in the longitudinal track as "the best of both worlds" [#16, longitudinal]; in her residency interviews, she could speak to clinical practice in a community setting and in an academic medical center.

Formal advising cued students into what mattered as they transitioned to residency. One student acknowledged what forms of capital were now deemed important, but lamented the mismatch between capital in this phase and the skills necessary to succeed in the future.

> You need to do well on your Step 1 exam. You need to have done well in your major clinical year. And you need to develop some strong relationships with [specialists] that have some influence in the field … But no one ever checks to see whether or not you have any operative skills before you go into a surgical specialty. That seems a little bizarre… I think just doing well as a student in your clinical year and doing well on your Step 1 and being a likable person, that's all you can do. [#3, longitudinal]

Harkening back to the preclinical phase, students continued to put stock in medical knowledge, but now this type of capital was less about acquiring and applying new knowledge and more about having good grades and research experience. And they continued to vie for capital (i.e., relationships with reputable physicians), but now these relationships had implications for their getting into residency. One student described her strategy to secure capital, a strategy that circumvented formal advising.

> I went back to do a sub-I with an attending on my Medicine rotation during third year. I wanted to work with her again and she gave me a lot of advice about getting into residency. I think I want stay here for residency so she talked to me about how to get into this program. [#5, rotational]

Despite changes in the field and capital from phase to phase, students continued to rely on their dispositions of initiative and flexibility. Eight months prior to graduation, one

student identified initiative as a subconscious disposition that carried him through medical school.

> My goal when I got into medical school was to maximize all of the learning opportunities I had and to learn as much as possible. You know, learning from experience was challenging. I had to learn about the disease process, different ways to approach it, and how to relate to different patients and their families…I had to throw myself into it and not wait for one particular outcome. It was more the disposition than, you know, the conclusion. [#13, rotational]

Another student recognized anew that relying on flexibility and openness to learning new things was almost second nature and would continue to serve her well into residency and beyond.

> This seems so obvious and like, big to me: to be a good physician, to be a good medical student, and to be a good resident, you have got to constantly learn. As a medical student, it was really a lot of reading and getting that fundamental knowledge. Once you have those fundamentals, you have to be open to learn in a lot of different environments, like interpersonal relationships and working with a team and being constantly curious. [#6, rotational]

Preparation for residency: summative discussion

As students prepared for residency, they experienced the UME field as a more competitive space, within which success depended largely on garnering capital in the form of grades, letters of recommendation, and research experience. To gain these types of capital students relied on initiative and flexibility, the same ones they relied on in previous phases.

Discussion

Our longitudinal case study illustrates that medical students experience medical school as a series of transitions that occur, not in a social vacuum, but in a complex and often competitive social context. The students in our study acclimated to overlapping social structures, or fields: medical school itself and the health system. To successfully navigate transitions, students learned to secure capital in the form of medical knowledge and social connections in some phases, and capital in the form of reputable patient care and being noticed in others. Simply put, gains in different types of capital, over time, positioned them well to transition to the next phase of training. Students consistently relied on dispositions of initiative and flexibility to achieve capital despite variations in field and capital. It was as if these dispositions were second nature.

Consistent with seminal work by Sinclair (1997) and by Becker (1961), medical students in our case study came to know much about how to navigate UME without being explicitly taught. Central to acquiring this skill is an understanding of what matters (i.e., capital). The judgments that students made about what matters were shaped by a collective understanding, within and beyond Columbia University's College of Physicians and Surgeons, of what it takes to succeed in medical school. Our findings, especially our analysis of the capital students valued, provide useful insight for medical school faculty. On the one hand, students may not fully embrace learning about things they do not value, even if it falls within a competency domain. For instance, health system education, in and of itself,

was not consistently recognized by students as capital even though quality improvement, cost-awareness, and practice management are elements in the systems-based practice competency domain (Englander et al. 2013). On the other hand, students are likely to embrace learning that positions them well for the next phase of training. For example, students were particularly committed to learning the skills of physical examination in the preclinical phase because of the impending "need to know" in MCY.

We would be amiss to portray students as lacking a sense of agency. While our research suggests that students make many subconscious choices in order to successfully navigate transitions in UME, they also participated in non-academic, non-clinical extracurricular events (e.g., plays and musicals sponsored by the medical school) and safeguarded time for family and friends. That said, we reported what was most obvious to us in our analysis. By acclimating to the field of UME, understanding "what counts" (i.e., capital) and relying on subconscious dispositions to gain capital, students reinforce the social structure of UME and the practices valued therein. We did not interview faculty who may have been in a position to selectively distribute resources (capital). Nonetheless, while students often acknowledged the existence of hierarchy and inequalities in UME social structures, they seemed to capitulate and therefore reproduce hierarchy and inequalities, at least in their efforts to achieve the short term goal of "succeeding" in UME.

As a critical theory, Bourdieu's model helps unmask the dominant status quo in UME and challenge what is assumed to be common sense (Brookfield 2005; Brubaker 1985). Faculty and other stakeholders in UME—ourselves included—invest much time and effort in attempts to reform medical education by designing and implementing interventions. However, such commonsense initiatives are not always grounded in a sufficiently nuanced understanding of the social structures (field) or resources that students take seriously (capital). A Bourdieuian lens helps us see that the failure of such interventions might not be of our own making, but rather stem from complex socially sculpted situations. For example, integrating formal instruction about medical science with clinical experience seems to call for a shared understanding of capital. However, students in our study were keenly aware that what mattered was not always, and not only, reputable patient care.

Our application of Bourdieu's Theory of Practice is particularly timely. We propose that the set of social structures that trains physicians in the US (field), with its increase in the number of medical students without a subsequent increase in residency positions, compellingly informs students' actions and requires them to rely heavily on specific dispositions (habitus) in order to acquire the "power" of resources that aid entry to residency (capital). Future research using this theoretical frame could provide useful insights into how field, capital, and habitus inform medical students' personal identify formation transitions from "first-year medical student" through to "senior resident." Such research could examine how social structures shape, and internal dispositions regulate, personal self-identity development and professional socialization.

Research invariably involves tradeoffs, and we acknowledge the ones we made in sampling and data collection. Although our data from 22 students has sufficient depth, a single institution case study has limited breadth and may have limited transferability. We used a convenience sample of students; nonetheless, those who volunteered remained engaged and we had excellent participation rates throughout the study. We had good representation of students in the longitudinal track; nonetheless, they were the first group of students in this track and may not reflect the experience of students in subsequent groups. Our data reflect students' recollection of their experiences obtained in one-on-one interviews. We were interested in students' perceptions because we believe perceptions are real in their consequences. For example, whether or not grades and letters of recommendations

should be capital as students prepare for residency, the students in this study believed both to be important to transition to the next phase and acted in accordance with this belief.

We would be amiss to employ Bourdieu's theoretical framework without conscious attention to how our own positions in medical education, and our own proclivities as researchers, bias our findings. We selected quotes from interviews to reinforce our understanding of Bourdieu's key concepts in relation to the data. Our selection of quotes provides one perspective and excludes from consideration other perspectives. Data collected from interviews were not transparent to the students but subject to the same conditions Bourdieu propose for other social contexts. Students may have viewed the opportunity to participate in these faculty-led interviews as another way to take initiative and "be noticed". Moreover, interviews are not the ideal method to capture "live" transitions and our pre-determined interview schedule may not have coincided with times when students could ideally speak about their transitions.

In conclusion, we used Bourdieu's theoretical model to situate our understanding of local issues at one medical school within a broader and oft-overlooked social context. As students journey through phases of medical school, their understanding of the UME field evolves. Students' perceptions of the importance of different kinds of capital vary from phase to phase; in contrast, the personal dispositions upon which they rely to gain capital are relatively consistent.

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