

Chasing Checkboxes: A study of pre-medical experiences in the age of holistic admissions

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| Acknowledgements | 2 |
| Abstract..... | 3 |
| Introduction..... | 4 |
| Background | 4 |
| Medical School Admissions Process & Requirements..... | 4 |
| The Rise of Essential Extracurriculars..... | 7 |
| Methods..... | 9 |
| Selection of Study Participants | 9 |
| Data Aggregation & Analysis..... | 10 |
| Findings..... | 10 |
| Understanding the Game..... | 11 |
| Building the Game | 11 |
| Major, Minor, and Coursework Choice | 11 |
| Extracurricular Choice and Participation..... | 12 |
| Maintaining the Game..... | 13 |
| Perpetuation by the System..... | 13 |
| Perpetuation by Peers..... | 15 |
| Experiencing the Game..... | 16 |
| Perceptions of Coursework and Extracurriculars | 16 |
| Perceptions of Time and Self..... | 19 |
| Discussion..... | 21 |
| Bibliography | 24 |

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Abstract

Based on the perceptions of a pre-medical student, becoming a doctor has never been easy, and medical school admissions continually grow more competitive. Holistic review, the process of evaluating applicants while balancing their academic metrics with experiences and attributes, has become more common in medical school admissions. However, from a pre-medical student's perspective, holistic admissions often add additional expectations on top of already rigorous requirements rather than balancing traditional academic metrics with a broader evaluation of candidates. This study examines how this perception of evolving expectations shapes the undergraduate experiences of pre-medical students long before they apply.

I conducted semi-structured interviews with pre-medical students across different academic years to assess their preparation, career aspirations, and perceptions of the pre-medical pathway. Additionally, I gathered and analyzed data on pre-medical activities listed in medical school applications to identify trends in applicant experiences. Findings reveal significant stress among students, driven by both the breadth and depth of required coursework and extracurricular activities. Many students reported feelings of inadequacy despite extensive preparation, often citing admissions expectations as their primary reason, regardless of their feelings about their planned career. These pressures raise concerns about burnout and whether the pre-medical process is effectively preparing students for a career in medicine.

These results suggest a need for reform in medical school admissions, including clarification on application guidelines, restructuring of the pre-medical curriculum, and increased student support. While holistic admissions seek to broaden applicant diversity, the current approach may unintentionally disadvantage students by increasing their perceived burden

without adequate guidance. Future research should explore policy changes that balance effective admissions with student well-being, ensuring that medical education remains sustainable.

Introduction

While there is significant literature concerning medical socialization, the process by which a regular person becomes a physician, little has been written about the impact of the pre-medical years on medical socialization, and the overall character of the physician workforce (Stern and Papadakis, 2006; Lin et al. 2014; Michalec & Hafferty, 2022). The vast majority of medical schools self-reported the use of one or more aspects of holistic review in their admissions process (Conrad et al., 2016), yet much of the study on pre-medical students focuses mainly on their demographics or academic metrics, such as grades and SAT scores (Grace, 2017), curriculum design and requirements (Barr, 2010), financial aspects (Baugh et al., 2019), or the impact of stereotyping (Conrad, 1986). There is little study to be found on pre-medical perception of holistic medical school admissions, specifically. As such, this review will focus on the current holistic medical school admissions process and the perception of it from a pre-medical perspective.

Background

Medical School Admissions Process & Requirements

Over the past hundred years, medical school admissions have undergone a large overhaul. Abraham Flexner defined standards for medical education in his 1910 Report, and yet still recognized that much of medical education depended on selection—who can become a physician? There has been much discussion of how to prepare students for this lifelong undertaking, mainly in the academic sphere: which courses should be considered prerequisites for medical school or

what should be tested on the MCAT, and what other academic processes have value in student selection (Gross et al., 2008). These are “hard” requirements: the necessary qualifications to be enrolled in medical school in the U.S. MUST have a bachelor’s degree from an accredited U.S. college or university and associated GPA and certain course prerequisites that vary by school (*Admission Requirements*, n.d.). Many, barring those in certain B.S./M.D. or early assurance programs, must also take the MCAT®, an approximately seven-hour exam consisting of 230 questions within four sections, colloquially known as Chem/Phys, CARS, Bio/Biochem, and Psych/Soc (Icahn SOM Staff, 2022; AAMC, 2025). Additionally, there are course requirements associated with students’ particular undergraduate major and/or minor, and breadth courses or “gen-eds” required by the undergraduate institution itself (Michalec & Hafferty, 2022). While one can debate endlessly on what qualifies as ‘acceptable’ to gain admission to any one medical school, each candidate must fulfill these ‘hard’ requirements to be eligible for medical school admission and matriculation.

In opposition to the ‘hard’ requirements are the ‘soft’ requirements. This includes most extracurricular activities, including but not limited to research, shadowing, clinical experience, volunteering, awards, leadership experiences, teaching, athletics, and advocacy. As Michalec & Hafferty (2022) wrote, holding experiences in any one of these activities is often not, by definition, a requirement, but a “recommendation” to gain acceptance to medical school—still, one would be hard-pressed to apply without them—hence the title of ‘soft’ requirement. In AMCAS, alongside sections for biographic information, academic requirements, letters of recommendation, test scores, and essays, these ‘soft’ requirements occupy the Work and Activities section. Within this section, there are fifteen slots for various activities. Applicants can list their activities under one of many categories: Community Service/Volunteer -

Medical/Clinical, Military Service, Community Service/Volunteer - Not Medical/Clinical, Paid Employment - Not Medical/Clinical, Physician Shadowing/Clinical Observation, Teaching/Tutoring/Teaching Assistant, Leadership - Not Listed Elsewhere, Intercollegiate Athletics, Paid Employment - Medical/Clinical, Honors/Awards/Recognition, Research/Lab, Social Justice/Advocacy, Presentation/Posters, Artistic Endeavors, Conferences Attended, Hobbies, Publications, Other, or Extracurricular Activities (AAMC, 2024).

| Admission Variable | Highest Importance Ratings (≥ 3.0) | Medium Importance Ratings (≥ 2.5 and < 3.0) | Lowest Importance Ratings (< 2.5) |
|--------------------|--|--|---|
| Experiences | <ul style="list-style-type: none"> ● Community service/volunteer: medical/clinical ● Community service/volunteer: not medical/clinical ● Physician shadowing/clinical observation ● Leadership not listed elsewhere ● Paid employment: medical/clinical | <ul style="list-style-type: none"> ● Research/lab ● Military service ● Other extracurricular activities ● Paid employment: not medical/ clinical | <ul style="list-style-type: none"> ● Teaching/tutoring/teaching assistant ● Intercollegiate athletics ● Conferences attended, presentations, posters, publications ● Honors, awards, recognitions |

As evidenced by these aggregate responses by admissions committee members in a 2023 survey published in the *Using MCAT® Data in 2024 Medical Student Selection Report* (AAMC), these activities have varying weights when used for decision-making by admissions committees. The relevant partial piece of this chart has been reproduced above. Several categories listed in the Work/Activities section in the AMCAS application have no attached data or rating. It’s clear that these ‘soft’ requirements hold just as much importance as the ‘hard’ academic requirements, and as we consider the pre-medical experience, this added burden should be taken into account.

The Rise of Essential Extracurriculars

There is little empirical study on the effects of extracurriculars in the pre-medical years, with the few studies available focusing mainly on the academic experience (Lin et al., 2013; Gross et al., 2008), despite the standard of holistic review rooted in modern medical school admissions (Conrad et al., 2016). Medical schools are not a monolith, and each has its unique criteria for admissions, but many differ more on their expectations surrounding extracurriculars than their academic requirements. So much so that extracurricular participation choice can be thought of as a sort of ‘capital’ in the pre-medical space (Michalec & Hafferty, 2022). Capital is a theoretical concept explained by Bourdieu (1986) to describe the power of certain resources, how valuable they are, and how they offer the individual holder a higher degree of social currency. According to Michalec & Hafferty (2022) extracurricular capital requires an ability to find the gap in what medical schools truly value and what they *say* they value, along with identifying nuance and acquiring what specific medical schools are looking for regarding certain requirements, and is thus different from other forms of social or economic capital associated with medical school admissions.

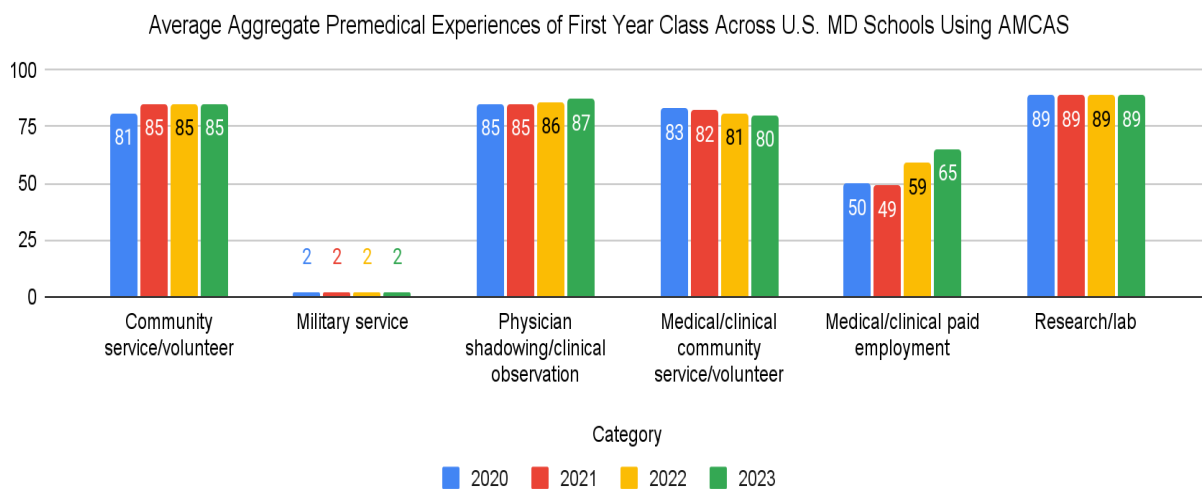


Figure 2: Average Aggregate pre-medical Experiences of First Year Class, from MSAR

In the Medical School Admissions Requirements (MSAR) Guide, there is a page for each M.D. granting school in the U.S. Each tab has a variation of this chart, noting the percentage of the first-year class who reported significant experience in the areas noted in the Work and Activities section on their AMCAS application. The chart above contains aggregated data across the 147 U.S. M.D. granting institutions, excluding Canadian and Caribbean schools in the MSAR. From 2020 to 2023, the percentage of applicants who entered significant experience in the category of Medical/clinical paid employment increased by a total of 15% on average, without a significant decrease in any other category. In every category except Medical/clinical community service/volunteer, either stayed steady (Military service, Research/lab), or there was an upward trend in the number of people in the first-year class who had reported some activity in that category. Regardless of what the data shows, popular sentiment among pre-medical students echoes that medical school requirements have become increasingly stringent and unattainable for many (Lin et al., 2014). Much study has been conducted on the importance of clinical exposure/experience for medical students (Littlewood et al., 2005; Tayade & Latti, 2021). Yet, in recent years, it has become normal, expected even, that pre-medical students gain significant hours in shadowing and clinical experience as well (Michalec & Hafferty, 2022; Kadavakollu et al., 2025).

Methods

This study examines mainly sophomore and junior pre-medical students at a public, predominantly White research university in the Northeastern United States, referred to here as The University. Participants were recruited through multiple channels, including emails sent to students enrolled in medical school prerequisite courses and informational fliers posted in buildings that house classrooms and laboratories for those courses. The final sample consisted of

eight students who intend to pursue an MD or DO degree after earning their undergraduate degrees. Each student was asked questions about their major/minors, their coursework selection, their extracurriculars, their motivation for becoming a physician, their excitements and/or concerns for the medical school application process or their career as a physician, and their perceptions surrounding coursework, extracurriculars, their peers, their environment, and their identity as a pre-medical student.

Selection of Study Participants

Participants completed semi-structured interviews lasting 30 - 90 minutes concerning their current understanding of the pre-medical track, the medical school application process, the challenges of their pre-medical identities, and attitudes surrounding what is required of them to achieve success in their desired career. Interviewees signed consent forms, agreed to be recorded, and were given a \$20 Amazon gift card for their participation. I assigned pseudonyms to each participant in the study to protect anonymity and provide confidentiality to each student. My advisor, Dr. Lauren Olsen's IRB granted the use of human subjects for this specific study.

Data Aggregation & Analysis

The author gathered data available for purchase from the Medical School Admissions Requirements (MSAR) Guide. Data is available for the admitted first-year class of any medical school that uses AMCAS, on the percentage who reported any significant activity grouped into six categories: Community service/volunteer, Military service, Physician shadowing/clinical observation, Medical/clinical community service/volunteer, Medical/clinical paid employment, and Research/lab. Data from 147 U.S M.D. granting schools using the MSAR Guide was aggregated and averaged to look at overall trends in extracurricular activities for recently

admitted medical students. For qualitative analysis, interview transcripts were analyzed manually. I printed and structurally coded each transcript by hand, following qualitative guidelines. I conducted a first line of structural coding to note recurring themes, and a second line of axial coding to reveal relationships and underlying patterns within the data. I focused mainly on students' perceptions of their participation in activities as pre-medical students.

Findings

The process of becoming a doctor can be thought of as a game. As Jenkins (2020) writes of interviews with residents, 'playing the game' involved a formulaic 'checking off' of the required boxes to get into medical school, and simultaneously differentiating themselves from others, which eventually enables them to reach their desired specialty. Jenkins reports that this process of 'playing' often starts in high school or earlier, with advantages and disadvantages accumulating over time. Thus, my findings of pre-medical students can be grouped into two broad categories, both portions of the game of becoming a doctor: understanding the game and experiencing the game.

The first barrier for students is *understanding* the game. External factors affect the foundational knowledge that students have, such as understanding the 'hard' and 'soft' requirements for a successful medical school application, or the exposure they get to medicine before college. As with any game, knowing the rules is important. This knowledge affects choices along the pathway, like courses or extracurriculars. The system contributes to the understanding of the game through the provision and withholding of information. Pre-medical students and their peers, then also build an understanding of the game throughout interactions within the group defined as 'pre-medical.'

The second barrier is *experiencing* the game. This is how students move through their pre-medical years—how do they feel about the courses they’re taking or the activities they’re participating in? What is their experience as they prepare to apply to medical school? Do they feel satisfied with it?

Understanding the Game

Building the Game

Major, Minor, and Coursework Choice

Students are subject to expectations from the moment they begin the pre-medical process. The earlier they begin to think about the process, the more time they have to consider how they will prepare to jump each hurdle within it. For example, Danielle is a pre-medical student who has known she wanted to be a doctor since she was young; when asked about why she wanted to become a doctor.

So now I’m in high school, and in the 10th grade, we did a unit on each of the fields of medicine. So we talked about neuroscience, cardiology, all the systems, and with the systems, we talked about the doctors. We talked about the psych unit and I don’t think I’ve ever enjoyed something so much.

This early exposure has helped her anticipate some changes in her journey that weren’t immediately obvious to other students. Danielle also chose a major she’s passionate about, and when asked about her choice of major, says:

Well, I thought I had to be a bio major, but I did a lot of research when I was applying to colleges, and when I was looking into it, I found I didn’t have to.

Danielle was able to choose a major she actually enjoys, and therefore feels more fulfilled.

In contrast, Jack chose a major he isn’t happy with. When asked about why he chose biology as a major, he says:

Because I thought I had to. I talked to my counselors, said “I want to do pre-med, what should I do?” and they said, “Oh, do biology.” Coming into college, you realize it sucks that there’s not a major called pre-med, because no you have to take classes for your major and a lot of times they’re not related to medicine. What if med school doesn’t work out? What am I supposed to do with a biology degree?

Jack did not have the early exposure that others had and was therefore underprepared to make certain decisions along the pre-medical pathway. There is a gap for external experts, like advisors and admissions teams, to provide knowledge to potential applicants early in the process, yet it is often missed.

Extracurricular Choice and Participation

Early exposure is also helpful in extracurricular choice & follow-through. Consider Zachary, a student who once attended a competitive high school, when asked about the reasons behind his extracurricular participation.

The reason why I got involved as quick as possible was just because it’s something I wanted to do in high school, and going from that competitive high school, it’s like everyone is doing some sort of research or some sort of activity, and I didn’t get to do that. I wanted to contribute to the science....Everything’s underlined with the fact that it’s good for an application. I kind of wish it wasn’t like that, because it would be less pressure for me to get published, or work towards presentations, instead of enjoying the process.

Zachary mentions his competitive high school environment as a driving factor behind his participation in research. This is a double-edged sword. One's peers can contribute to perceived competition, and early exposure can allow a pre-medical student to gain information about the types of activities they should participate in. Zachary highlights this fact, but he is unhappy with it. His feelings showcase his perception of what is valuable in the pre-medical process—productivity at the expense of enjoyment and interest in research, though this perception can be

applied broadly to other activities. It's also not uncommon among interviewees, nor is it among pre-medical students in general (Lin et al., 2013).

Maintaining the Game

Perpetuation by the System

The system perpetuates these perceptions and uncertainty. Nowhere on the AMCAS medical application does it list a specific number of hours or a specific type of activity required to obtain admission to medical schools. Requirements differ by school, as well. None require extracurricular activities, but many *strongly* recommend them. (Lin et al., 2013; Michalec & Hafferty, 2022). Sarah, a student who expects to be a non-traditional applicant, when asked about what she would change about the application process, says:

I feel like it would be helpful to know what specific schools, in giving acceptances, do prefer and not prefer. I feel like everyone says “Yeah, have a ton of everything. If you know you want to go for one specific thing, apply to a school that caters to that.” [REDACTED]

Pre-medical students on online forums have a general idea of which schools generally prefer certain activities. For example, when asked about school lists, users on Reddit or Student Doctor Network will warn against applying to certain schools if you don't fit their reported profile. For example, both Rush Medical College and Georgetown University School of Medicine are service-oriented institutions—without significant service experience and ability to speak on it, it isn't typically recommended that a student apply here. As an anonymous user comments on Reddit (*What Are the Service Orientation Schools and How Many Hours Do They Require ?*, 2023):

For service oriented schools, it's good to follow 200/250 rule for minimum (Rush requires that to make it through a filter) and then 500-1000 as recommended to be competitive(based off sdn).

Students are expected to parse this information out of generalized mission statements and hearsay, instead of, like Sarah says, providing that information themselves. This is draining for pre-medical students, as she continues, “I don’t know if I would change it, but it just feels so tiring to think about. It’s hard and tiring.” Browsing pre-medical forums like those mentioned above, one can find vast quantities of information on how to create a list of medical schools to apply to, underlaid with which schools are “service-oriented” or “research-heavy”, terminology that describes what individual schools value in ones application, often coupled with a minimum number of hours to achieve in that category of activity (Service-Oriented MD Schools, 2020). There is a gap for external experts, like advisors and admissions teams, to provide knowledge to potential applicants early in the process, yet it is often missed. The vagueness surrounding the ‘soft’ requirements is the heart of holistic admissions, which is defined as “an admissions process that considers each applicant individually by balancing their academic metrics with experiences and attributes” (AAMC, n.d.). Holisticity is doing more harm than good—in the pursuit of it, many major medical schools have undertaken formal curricular reform, such as reconsidering the coursework required during the pre-medical years and the subjects emphasized in the MCAT. However, they have neglected to couple it with reforms in their ‘soft’ requirements, like extracurricular participation. Just looking at formal curriculum serves only to change the number of requirements for medical school (Lin et al., 2014; Gross et al., 2008).

Perpetuation by Peers

When looking at how students build understanding, we must look at pre-medical students as a group, along with isolated students. Interactions with peers within all tiers (i.e., friends, classes, institutions, and country-wide) help to shape the pre-medical space. When asked about the culture of her required pre-medical classes vs. her other classes, Jenny notes

Everyone is really serious in class. It's sort of like, 'Oh, I'll only talk to you if I see something that can benefit me.'... In my Cognitive Neuro class, that is not a pre-med requirement, the people I'm in class with are so much friendlier.

Jenny sees the culture in her pre-medical classes as serious and transactional, while she sees the people in a different class as overall nicer. Among her friends, a smaller circle, her opinion of pre-medical students changes.

All of my friends who are pre-med, we do study together. So there are people who are willing to help you, and you know, not dive into toxic pre-med culture. But it definitely exists, and there are people who are like 'Oh, I need to be the best, and you suck.'

Sarah, when asked the same question, says

I can very easily pinpoint someone who is pre-health and someone who's just in the major for the major. They just feel very competitive, that's an overall vibe I've gotten. It's very much like 'I need that grade, I need an A. Oh, you got an A? I don't like you now.' But then I go to my major classes, and we are all there because we love the subject, and it's not competitive, it's nice. Then I go back to orgo, and it just doesn't feel accepting.

Jack's experience has been slightly different, but he attributes it mainly to school culture:

I think the one thing with our institution that's not true in bigger schools is that everyone is here because they live close by, or it's cheap. So, no one is really trying to overtake one another because everyone is chill. That's the easiest way to put it.

The majority of interviewees perceived pre-medical students as a group as competitive, comparative, and cutthroat. However, within small circles, such as friend groups or colleges, those opinions often softened. This is indicative of pre-medical culture as a whole, and the effects of such perception invite further examination.

Experiencing the Game

We've covered what it takes to understand the game, but now we'll go through how students experience the game and study the perception of the pre-medical pathway by pre-medical students.

Perceptions of Coursework and Extracurriculars

Ella, asked about why her pre-medical classes are required and what they prepare her for, says:

I guess they want you to have the problem-solving skills, and [the content] is obviously on the MCAT....I think they prepare me for the kind of higher-level thinking that medical school requires. I don't think that all of it is directly relevant to what I'm gonna need for the rest of my life; like, I'm not going to need orgo again.

Zachary, when asked the same questions, says something similar.

Orgo and physics, they're on the MCAT, obviously. But I do think you need to know these sorts of things for when you're a doctor or you're in medical school. A lot of the mechanisms make more sense if you know the context behind them, which is why orgo is important....It's better you know it than not, as a medical professional.

Jenny agrees and answers this question similarly.

I feel like it's good to have foundational knowledge of how everything works, like basic biology, organismal stuff, dissections, and everything. They all have applications that can be used in medicine and having foundational science is very important in order to understand what you need to know as a doctor.

As reported, many students mentioned basic science as foundational knowledge for clinical applications, with a secondary mention of how important it was to understand these concepts in depth for the MCAT. Many mentioned preparation mainly for medical school, as opposed to their future careers. Some disagreed strongly with the importance placed on coursework. In particular, Zachary says:

What they prioritize for a pre-med education is just so far off from what you need to be a doctor. It's like—I don't know, there's just no way Orgo is teaching you how to be a better person.

Pre-medical students who learn about 'soft' requirements understand that, alongside their coursework, they are also expected to participate in extracurricular activities to broaden their experiences. In contrast to coursework, students report learning much from their extracurriculars. These students aren't just going to class—on average, the interviewees had participated in/were participating in 6.75 unique extracurricular activities at the time of the interview, and all with plans to start new activities before applying to medical school. Farren, when asked about the impact of her clinical experience, reports:

Seeing patients get better and *happier* made me feel more encouraged to go into the field....having these good experiences serves as a driving purpose and keeps me going.

Silas expresses appreciation for his clinical experiences:

That's my favorite part of the journey right now, like out of school and everything, because you're hands-on, you're doing what you want to do in the future.

Students mentioned frequently that their experiences were valuable in seeing the positives and negatives of the daily life of a physician. Many also said experience was the defining factor in choosing their pre-medical path. Zachary states that his shadowing had a significant impact on him:

One thing that really did solidify that I want to pursue surgery was when I was shadowing. Some of these surgeries would be 10-12 hours, and I'm just standing there. I'm just watching, right? It's a privilege to be there, and I'm not trying to miss anything. That sort of solidified [my decision] when the days weren't long, I'm able to drive an hour there, watch for 12 hours, and it doesn't feel like a long day.

In contrast, Farren notes that her research experience showed her the opposite:

When I did the years of research, I was really interested. But then, I missed the patient interaction. And I knew that what I was doing was really impactful, and I knew the

research was very interesting, but I knew at the end of the day, seeing the one-on-one face-to-face interactions was very meaningful for me, so I decided to go back to medicine.

Zachary and Farren's experiences were very different, but they showed them the same thing: a career in medicine is what they want. In that vein, each interviewee was asked why they want to be a doctor, what they are excited about and concerned for, and to define broadly what traits are important for physicians to have. Answers varied from interviewee to interviewee. "Why medicine" was personalized to the individual, while concerns and excitements were more similar between interviewees. As Silas writes,

The worries I do have are that it's so time-consuming. I'm [worried I won't be] able to be family-oriented, but I think I have to find middle ground. That's my biggest worry, because at the end of the day, time is money.

Silas is concerned about the length of the process to become a doctor and the demands of his career later in life. The majority of interviewees mentioned similar thoughts. As for traits, interviewees most frequently noted that physicians should be compassionate or empathetic. Following those traits, communication skills, cultural competency, being considerate, and being knowledgeable were each mentioned more than once. Most interviewees stated these traits could be acquired somehow, throughout life. In that vein, all of the interviewees noted that their experiences helped them build these traits, while less than half stated that their coursework did. All interviewees also rated their experiences outside the classroom as having greater value for their future career than their coursework. Ella summarizes this well in her interview.

My experiences have given me what I need to be a doctor. My coursework is what's preparing me for the road ahead to become a doctor, because it's only going to get harder from here. It's resilience, literally, to just sit down, study, and learn the material in a way that's not just memorizing....But experience-wise, I think that's given me a lot of the traits, like thoughtfulness, that I'm gonna need to actually *be* a doctor.

She doesn't completely discount her coursework, but is able to recognize the differences in how she is being prepared for her future career via experiences, and how she is being prepared for just medical school via coursework. From that view, these findings become worrying. Considering that the largest barrier to entry to becoming a physician in the U.S. is entry to a U.S. MD school—as in, once you're there, you gain an inordinate amount of support to prevent you from stopping progress on the path to becoming a physician—it is primarily the pre-medical space that shapes the character of the physician workforce (Jenkins, 2020, pp. 33–44). Interviewees freely admit that they are not being prepared by the classes they are required to take, often citing their extracurriculars as a primary preparation and motivator for a career in medicine, instead. Still, these things are not 'required.'

Perceptions of Time and Self

While it is enough to say that the application process does not adequately shape the character of the physician workforce, the findings show that it actively creates a toxic environment for students. Across the board, there were frustrations around a lack of time, negative self-perception, and perceiving competitiveness between peers and the self among interviewees. Starting with the first, a majority of interviewees listed time, or lack of it, as a major factor preventing them from adding extracurriculars. Ella, after expanding upon her extracurriculars and club commitments, says this:

I mean, at the end of the day, it's a commitment. I think it's really hard sometimes to commit to something that's not like directly applicable to what I need to do later. Especially lately, it's been so hard to just find time during the day because I feel like I'm trying to do a lot of things and like these are all things like—I'm not saying I don't enjoy them—but, a lot of works from 9 to 5, which is the hardest part. I need things that run from 7 to 11, because you can't just pile all these things up from 9 to 5 along with classes. So I think it's really hard to choose something that's probably not going to benefit me later.

Ella is expressing discontent surrounding her lack of time to do things she'd like to—something holistic admissions claims to encourage. Jenny expresses similar thoughts, balancing her choice to go home for the summer rather than remain on campus:

I went home last summer, and that's when people started—it became hard for me to like, go do things. I'm trying to get something this summer like volunteering or research, I really want to get into research. A lot of places require you to come in within 9 to 5 on Monday through Friday, and I just haven't had time in my schedule.

Time pressure, alongside perceptions of competition, can even contribute to the decision to take more time as a pre-medical student before applying. Jack, who is intent on not taking a gap year, expands upon his worries.

I think somewhere along the line, inherently, without realizing, a lot of pre-meds go 'Oh, you're doing this, you're doing this, you're doing this, and you only got into *this* med school. So there's no way I'm getting into med school with what I'm doing.' So now, I need to take a year off to prepare [...] now, no matter how much you do, you don't know if you're going to get into med school. From that fear, you're just gonna take a year off to do even more.

Jack's frustrations aren't uncommon. Sarah shares the same thought when asked why she is considering a gap year:

I don't think I will get in if I don't like— [take a gap year]. I don't even think I even stand a chance....If I didn't feel there was such intense competition of needing *this* amount of hours, or *this* amount of experience, or anything like that, I would just apply straight out of undergrad, and that would be ideal for me.

Sarah stated earlier in the interview that she was “grades heavy, experiences light,” indicating that she has mainly focused on her studies over her extracurriculars. However, she feels the gaps in her application keenly—the missing ‘soft’ requirements. Sarah is not alone in her plans: gap years are becoming more and more common among medical school applicants, with 71% of applicants in 2024 taking at least one (Allen, 2024). Perceived competitiveness for admission to a U.S. M.D. school is a vicious cycle when thinking about gap years. Considering the

considerable coursework and extracurriculars each interviewee had taken on, each was asked if they felt they were doing enough. Danielle notes anxiety surrounding ‘missing’ something.

I don’t think I’m doing enough to get into med school. And I think again, I feel like I’m missing something. There is definitely stuff I am missing, like I *know* I am missing, but like, something on top of the stuff that I already know I’m missing. I’m convinced there’s other stuff I’m missing.

Others, like Jenny, felt the weight of competition instead.

I know people who I feel are doing much, *much*, more than me. They still feel like they’re lacking in some way....I’m like, ‘You’re doing so much more than me! And if you’re lacking, what am I doing?’

A strong sense of inadequacy wound its way through every interview. No matter what an interviewee had done, each reported significant feelings of inadequacy or insufficiency surrounding candidacy for medical school.

Discussion

In identifying and understanding these student experiences, it’s clear that frustration permeates the pre-medical pathway at every step—coursework, extracurricular choices, and day-to-day life. As I examined holistic admissions from a student perspective, I found it to be lacking. Students are firmly aware of vague admissions criteria and perceive holistics as additive rather than balanced. While they recognize the benefit of each activity or course undertaken towards their future education or future career individually, students feel the combined weight of those loads keenly. This is revealed through interviews as feelings of stress, frustration, and inadequacy.

Examining my findings deeper, I find that pre-medical students navigate through their undergraduate career and beyond with the perception that the information they’re basing their path on is unclear. Students mention doing specific activities simply because “it’s good for the

application” and prioritize that over hobbies, other activities they may hold more passion for, and even sleep, even though many medical schools don’t explicitly list what is or isn’t required, extracurricularly. Many compare themselves to their peers, reporting that they engage in certain activities because other students have, or because they are simply *worried* that other students might have more experience than they do. There is constant assessment of the effectiveness of the self through perceived competition, and this affects many pre-medical students’ decision-making. Students also conflate achievement in school or hard sciences (many of which are seen largely on the MCAT) with adequacy for candidacy for the medical profession.

As Jenkins (2020) reveals, the benefit of pursuing allopathic medical education in the United States can be thought of as an unspoken social contract: once individuals put in the work to admission to a US allopathic medical school, the profession supports and ensures they attain their professional goals. That is to say, there is a structural support system for students at US allopathic schools that eases their way into further training: residency, fellowship, and eventually a career. This shows that it is important to be cognizant of what characteristics we reward at the pre-medical stage, so that there isn’t later a professional mismatch between the preparation that medical school demands and what the medical profession requires. As Lin et al. (2014) make clear, “We are not arguing that medical schools should be admitting more students who aim to persevere, or fewer students who are individualists. Rather, we note that characteristics demonstrated during the premedical years will likely reverberate throughout medical school and residency, influencing how physicians-in-training think about and explain their decisions as students (and eventually as practitioners).”

I believe that this perceived ambiguity in admissions expectations leaves students to fill gaps themselves, which reinforces inequity—those who already understand the game, who have

23

more social, economic, and extracurricular capital, are better prepared.

Building off these findings, I'd like to contribute to the conversation: pre-medical students' perception of their experience can be quite negative, especially in the face of unclear or incomplete information. I propose some measure of clarity in admissions expectations to minimize the gap between pre-medical students' perception of the pre-medical years and what admissions committees are striving to achieve with admissions holistics.

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