



# When the Penny Drops: Understanding how social class influences speciality careers in the UK medical profession

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## ABSTRACT

In the UK, the medical profession is socially exclusive and socially stratified as doctors from more advantaged backgrounds are more likely to train for specialities with more competitive entry. However, in research to date the causes and consequences of social stratification have been overlooked. We explore this subject here, drawing on a qualitative study comprising in-depth interviews with 30 medical students and doctors from less advantaged socio-economic backgrounds negotiating medical school and early careers. Using Bourdieu's 'theory of practice' we show how socialisation in the family and at school influences how aspirant medics from less advantaged backgrounds view the world, suggesting some inclination towards more community orientated careers, which may be less competitive. However, these tendencies are encouraged as they lack stocks of social, economic and cultural capital, which are convertible to power and position in the field. While allowing for both choice *and* constraint our core argument is that speciality outcomes are sometimes inequitable and potentially inefficient, as doctors from more advantaged backgrounds have privileged access to more competitive careers for reasons not solely related to ability or skill. Our main theoretical contribution is to literature in the sociology of medical education where ours is the first study to open-up the 'black box' of causal factors connecting medical students' resources on entering the field of education and training with speciality outcomes, though our findings also have important implications for practitioners, the profession and for patients. We discuss the implications for safe and effective healthcare and how this informs directions for future research.

## 1. Introduction

In the UK, the medical profession is both socially exclusive and socially stratified as doctors from more advantaged backgrounds are more likely to train for specialities with more competitive entry (Kumwenda et al., 2019; Santana and Chalkley, 2017). However, while policy makers, educators and leaders within the profession have recognised its composition should be representative of the population it serves (e.g.: British Medical Association, 2015), the causes of social stratification *within* medicine have been under-theorised and overlooked. We take-up this subject here, to ask how social class influences speciality outcomes, thinking particularly about the balance between choice and constraint.

Previous studies exploring how doctors choose speciality have noted the role of demographics and suggested those from less advantaged socio-economic backgrounds (SEB) have a 'natural' orientation towards what are sometimes called 'prosocial' careers, which are more community orientated and sometimes less competitive (Bennett and Phillips,

2010). Educators and policy makers have interpreted these patterns as largely positive, as the medical profession has been struggling to fill positions in specialities such as psychiatry, acute medicine, and primary care, especially in more deprived regions of the UK. A wider tendency to avoid general practice has been attributed in part to perceptions amongst medical students that it is a 'second-class' career (Alberti et al., 2017). Since medical students from less advantaged socio-economic backgrounds are more likely to take-up these roles, training more of them has been seen as a good way to fill related gaps (e.g.: Dowell et al., 2015; Nicholson et al., 2010; Nicholson and Cleland, 2017; Patterson and Price, 2017). However, while pragmatic perhaps, an alternative literature hints that background may influence speciality outcomes in a less positive sense as, for example, doctors with less financial support struggle to sustain lengthy training, which may encourage them towards specialities such as general practice for reasons other than preference, which has the shortest route to qualification (Vinnicombe et al., 2022).

Existing literature hints then at both choice *and* constraint but lacks a

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coherent theoretical or conceptual framework to explore the relationship between the two, and thus the balance between structure and agency. To unravel related complexities we draw here from the work of Bourdieu (e.g. 1986, 1990), whose definition of social class we also adopt as a complex ensemble of economic, social and cultural resources, known as the forms of capital, which inform an individual's socio-cultural outlook and dispositions internalised as habitus, to influence their relative position in a social field. These concepts have been widely used to show how (dis)advantage is reproduced through education (e.g. Reay, 2017), and how structural characteristics of elite occupational fields influence an actor's chance of accessing higher status and more remunerative roles (e.g. Friedman and Laurison, 2019).

Our study is novel as the first to apply this framework to consider the causes of social stratification in the medical profession. To do so, we draw from a qualitative study comprising in-depth interviews with 30 students and newly qualified doctors from less advantaged backgrounds studying at 14 medical schools across the UK. Interviews were first conducted with all 30 participants in 2019, of whom 16 were interviewed for a second time in 2023.

We show that socialisation in the family and at school influences how these aspirant medics view the world, suggesting some inclination towards more community orientated careers on entry to the field. However, these tendencies are not universal and may be encouraged or even forced as they lack valorised forms of capital which confer power, agency and dominant position. While allowing for both choice and constraint our core argument is that speciality outcomes are sometimes inequitable and potentially inefficient, as doctors from more advantaged backgrounds may have privileged access to competitive careers because they are more likely to possess the necessary forms of economic, social and cultural capital with which to successfully navigate the field of education and training as it is currently structured. These forms of capital may sometimes be quite separate from ability or technical skill, or neutral forms of human capital. Our main theoretical contribution is to literature in the sociology of medical education as we open-up the 'black box' of causal factors connecting students' portfolio of resources on entering the field of medical education and training with eventual speciality outcomes, though we also underline and discuss the important implications for the profession, for practitioners, and for patients, as this affects the provision of safe and effective healthcare. Before expanding on these points, we provide further background for our study and outline our conceptual framework next.

## 2. Social class and medical careers

The UK medical profession is extremely homogenous according to socio-economic background as in 2016 just 4% of doctors came from backgrounds defined as less advantaged on the basis of parental occupation and/or income, which compares to over thirty per cent of the population (Social Mobility Commission 2016). Over the past two decades, significant practical efforts have been directed at 'Widening Participation' (WP) when it comes to access, but evidence is now emerging that the profession is also socially stratified, with education often used as a proxy for advantage. In the UK, around 7% of school children attend a fee-paying or 'private' school, compared to over 90% who are educated by the state. The former suggests higher parental income and better access to educational resources and support, and privately-educated professionals dominate the most highly remunerated roles in elite occupations including law and accountancy (e.g. Friedman and Laurison, 2019). Evidence now suggests these patterns are replicated in medicine, where one study found that doctors who attended a fee-paying school are 1.7 and 1.4 times more likely to be training for speciality positions in medicine or surgery respectively, compared to general practice (Santana and Chalkley, 2017). Another found that after controlling for multiple factors, students from families where no parent was educated to degree level had statistically significant lower odds of choosing careers in medical specialities relative to general practice

(Kumwenda et al., 2019). This is significant because the latter is often assigned lower status within the profession, compared to surgery and some medical specialities, which may also offer superior pay, power and influence (e.g.: Alberti et al., 2017; Creed et al., 2010, Fazel and Ebmeier, 2009).

Where these patterns have been observed, they have generally been welcomed by educators and policymakers, for whom widening participation is motivated in part by social justice but also by considerations of workforce planning and effective patient care (British Medical Association, 2015; Department of Health and Social Care, 2018). Recent decisions to expand places at existing medical schools and open five new ones have been aimed at responding to shortages in areas such as general practice, psychiatry and acute care, while also making a particular contribution to training more young people from diverse backgrounds than has traditionally been the case (Health Education England, 2018). Some tendency towards social stratification is then embedded within the structure of medical education and training. Whether outcomes are equitable or efficient in relation to the distribution of talent has been relatively overlooked, though one exception is work exploring the experience of students from WP backgrounds while at medical school, which hints at related impacts on future careers. In their review of relevant literature, Krstić et al. (2021) identified how medical students from under-represented backgrounds may lack a sense of belonging, and experience identity conflict or feelings of inadequacy, amplified where they also encounter insensitivity. These experiences may contribute to difficulties accessing the resources and information necessary to succeed both during education and in later training including as some students from WP backgrounds protect their mental health by doing the minimum necessary simply to get through medical school, potentially contributing in turn to an academic attainment gap (e.g. Woolf, 2020).

In addition to efforts to tackle this attainment gap, policy makers have made some relevant changes to the structure of medical education and training in the UK. To provide brief context here, this is generally divided between four to six undergraduate years which includes a mix of classroom teaching and clinical practice, followed by two postgraduate 'Foundation Years' (FY) as junior doctors. Towards the end of this programme, which can be extended, students apply for speciality training which can be 'run-through' to qualification (for example, general practice and paediatrics) or 'uncoupled,' the training route for most hospital physicians, where students complete core training (CT) and then apply to competitive higher speciality training (ST). The length to qualification can be increased if students 'intercalate,' taking one year out of medical school to study an additional subject, leading to a BSc or equivalent. Until recently, FY places were allocated according to applicants' preference and a total possible score of 100 gained as undergraduates, divided equally between a Situational Judgement Test (SJT) and the Educational Performance Measure (EPM). The latter was made up of the candidate's decile ranking accumulated at medical school, along with any previous or other degrees, and extra-curricular academic achievements such as research publications, which confer additional points. The SJT and EPM will now be replaced by 'preference informed allocation' where all applicants who pass their undergraduate exams will be given a computer generated rank as they apply for FY training (National Health Service n.d.).

An explicit purpose behind these changes is to ensure more medical students secure their first choice of FY school, though this also reduces the emphasis on both academic attainment and extra-curricular activities at this stage, with some implications for fairness. Previously for example intercalation could add valuable points to FY scores but students from less affluent backgrounds are less likely to intercalate, because of financial constraints and limited awareness about the possible advantages (Baig, 2019; Mahesan et al., 2011; Nicholson et al., 2010). Kumwenda et al. (2019) also found that trainees who pursue careers in more competitive specialties had higher FY selection scores than colleagues who pursued less competitive ones, but that trainees from less advantaged socioeconomic backgrounds had on average lower

performance, one reason why they were more likely to choose careers in general practice and mental health. Again, differential outcomes were attributed by these authors to financial rather than ability differences as opportunities to build points through extra-curricular activities are more available to students and doctors from more affluent backgrounds. However, while academic attainment and extra-curricular activities will now become less important in the transition from medical school to FY training, they are likely to remain components of what is known as 'portfolio,' which can contribute vital points for later speciality applications. This is significant as wider evidence suggests opportunities to accumulate these points are unevenly distributed and for example, as [Nicholson and Cleland \(2017\)](#) report, while medical students from less privileged backgrounds can mobilise social networks to help gain entry to medical school, they are typically less aware of the need to leverage these networks once there, or how to do so.

Previous research provides then some insights into how socio-economic background might influence speciality careers, yet lacks a robust theoretical or conceptual framework which helps delineate between choice and constraint and, as it has been largely based on statistical data, lacks some explanatory power. [Kumwenda et al. \(2019\)](#) acknowledge their study left questions which could only be answered by qualitative research, including whether these outcomes can be explained by lack of confidence, a perceived lack of fit with particular specialities, or performance in early career. We explore these questions here using the framework provided by French philosopher Bourdieu to capture the multidimensionality of socio-economic background, as we explain next.

### 3. Class ceilings and medical careers

Bourdieu's wide-ranging body of work was concerned with culture, its reproduction and transformation, how this relates to social stratification in society, and the distribution of power. To explore these complex themes, he conceptualised social life as taking place on a series of overlapping 'fields,' systems of social relations where conformity to rules is played out by actors endowed with field-appropriate, recognised and convertible forms of 'capitals,' and a more or less appropriately aligned 'habitus' ([Bourdieu, 1986](#); see also [Atkinson, 2016](#): 592).

In more accessible terms, fields function like a game which all social actors play, though not necessarily with the same resources. Bourdieu conceptualised these resources as 'capitals,' and argued they act as the field's currency. Put another way, the capitals with which individuals enter the field influence the strategies and tactics they can deploy, and those with higher accumulated stocks of field-relevant capitals tend to enjoy more agency and power. Capitals come in three forms: economic (control over financial resources), social (networks of influence and support which might offer benefits in particular fields), and cultural (of which most relevant here are its 'institutionalised' and 'embodied' forms, with the former relating to credentials and qualifications and the latter to mental and physical dispositions, such as cultural and social competences adapted to the field, along with appropriate knowledge, skills, and tastes). Habitus can be seen as a reflection of these underlying dispositions, typically acquired as people are socialised within the family and at school, during which they internalise expectations and beliefs around what seems likely or possible for them, and what they perceive as most valuable in work and in life, which they reproduce semi-consciously through everyday actions or practices ([Reay, 2004](#)).

It is important to underline that habitus is not simply a question of individual preference but can also be seen as the way in which society becomes deposited in people and internalised, to reflect social and field structures. In practical terms, habitus can make some educational or career pathways seem unthinkable or improbable, as 'not for the likes of us,' although this should not suggest mechanical behaviour as habitus includes a creative and adaptive capacity which allows for a variety of 'moves' ([Bourdieu, 1990](#)). Individual aspirations and expectations may differ as people from similar backgrounds interact with specific fields, and as class intersects with gender, ethnicity and indeed personality. In

addition, where people experience a mismatch between their own habitus and the norms of the field, this can generate reflexivity and the capacity to think and act more strategically in relation to education and career. Overall however, people whose capital and habitus are aligned with the field typically have a better 'feel-for-the-game,' allowing them to accumulate more capital, including in its symbolic form, defined as status, respect and prestige.

One advantage of [Bourdieu's \(1990\)](#) theory of practice is as it illustrates how social position is influenced by though not determined by economic capital, as a range of subtle and subjective cultural factors come into play, allowing for both structure *and* agency. His core concepts have been put to wide use, including in medicine, to consider for example the range of resources influencing the association between health and socio-economic status beyond relatively objective or singular measures such as income or education ([Freese and Lutfey, 2010](#); [Moll-born et al., 2021](#), [Hammad Mrig, 2021](#)). The theory of practice has also offered a sophisticated conceptual and methodological framework to explain the reproduction of (dis)advantage in 'elite' occupational fields. [Friedman and Laurison \(2019\)](#) adopt this approach to explain a significant class pay gap in elite occupations in the UK, as they suggest prior socialisation internalised as habitus overlaps with embodied forms of cultural capital to influence aspirant professionals' perceptions of where they 'fit.' Those from less advantaged backgrounds may also lack resources with which to compete with more advantaged peers who have more economic capital to sustain precarious early careers, and access to the 'right' forms of social capital, which offers tacit knowledge on how to navigate careers, and more direct forms of sponsorship.

[Friedman and Laurison \(2019\)](#) did not specifically explore the cause of medicine's class pay gap which amounts to ten per cent per annum but did report that children with parents in medicine are twenty-four times more common in the field than in the population at large. It is reasonable to expect that medically qualified parents transmit particular advantages to their children, by equipping them with valorised forms of convertible capital and a habitus adapted to the field, which offers them an earlier 'feel-for-the-game' ([Bourdieu, 1996](#): 25).

Where Bourdieu's framework has been deployed within the sociology of medical education, it has been put to rather different use. For example, in his classic ethnography of medical training, [Sinclair \(1997\)](#) explored how medical students internalise sets of dispositions which structure the way doctors think and act, to represent a 'doctorly habitus.' [Luke \(2003\)](#) later suggested this medical habitus develops *after* medical school while [Balmer et al. \(2015, 2017\)](#) have explored how undergraduates navigate medical school to suggest students must quickly acclimatise to the field, understand the resources and social positions accorded value (capital), and rely on their subconscious dispositions including 'initiative' (habitus) to gain resources and social standing. These studies make an important contribution to literature exploring medical school as a lengthy period of socialisation during which the professional self is shaped, and which reveal medicine's 'hidden curriculum,' defined as the values and beliefs which permeate medical schools but are often unwritten (eg: [Becker, 1961](#); [Hafferty and Franks, 1994](#)). However, they pay limited attention to how a 'medical habitus' may be influenced by social class, or how an individual's portfolio of resources on entry to the field may influence and perhaps constrain the direction of their career.

A useful study as it offers more direct and related insights is then [Hindhede's \(2020\)](#) investigation into how Danish medical students evaluate status differentials as they select medical specialities, showing that 'first-in-family' students at medical school struggle to internalise the conditions of the field, or what Bourdieu called its *doxa*, and to develop the necessary 'practical mastery' to access the most prestigious careers. As such, she suggests they appear to 'willingly' self-sort into less competitive careers, though what appears a disinterested judgement of taste is in fact related to habitus and the struggles of the field. Our aim in the remainder of this paper is to capture related complexities as we illustrate not just *how* doctors from less advantaged backgrounds think

and behave in relation to speciality but also *why* they do so. We argue Bourdieu's theorisation of habitus and capital as flexible, interdependent and accumulative resources offering agency in specific fields offers an appropriate framework to achieve these goals, and describe our approach to data collection and analysis in more detail next.

#### 4. The research study

##### 4.1. Sample group

This paper originates in a study commissioned by a leading social mobility charity in 2019. The charity supports students from less advantaged SEBs to access medical school by providing help with applications, mentoring, and summer schools, and work experience during their final years at school. The term 'less advantaged' is of course relative but is defined by the charity as being first-in-family to attend university and having been in receipt of Free School Meals at age fourteen, with the latter suggesting a family income quite significantly below the national average. These factors determine eligibility for the programme, alongside strong academic performance at high school which indicates ability to access medical school. While we deploy a more subjective and nuanced view of social class for the purposes of analysis, we use socio-economic backgrounds to describe interviewees' position in a more objective sense in the remainder of this article.

This study came about as the charity commissioned the first author to conduct research to explore the relationship between social background and speciality careers, which has taken place in two phases so far, with ethical approval granted by the first author's institution (reference QMERC22.352). In the first phase of research, which took place towards the end of 2019, alumni of the programme between 2010 and 2018 with whom the charity remained in contact ( $N = c.350$ ) were sent information about the study and invited to participate. Thirty ( $N = 30$ ) volunteered to take part and having given their informed consent, participants were invited to take part in a second interview in 2023, when sixteen ( $N = 16$ ) agreed to do so. Interviewees were at different points in their education and training and were educated at a total of 14 medical schools across the UK, which did not include the 'new' medical schools established to help widen participation. Further demographic information is provided in Table 1, where interviewees are given pseudonyms. The stage they had reached in their education and training at the point they were interviewed is also indicated (UG for undergraduate, FY for Foundation Year training, and ST for those in specialist training, with the numeral indicating the year they were in or had recently completed).

##### 4.2. Data collection

The first round of interviews took place on the telephone as did three of the second round in 2023, while the remainder took place on Microsoft Teams. Interviews lasted between 60 and 90 minutes. All interviews were recorded with the interviewees' permission and transcribed, and transcripts were uploaded to the electronic package, Nvivo (v12). All interviews used the same topic guides, which focused on interviewees' childhood and education, why they had chosen to study medicine, their experiences starting out at medical school, and their aspirations at that point. Interviewees were then asked about experiences getting through medical school and, where relevant, moving into Foundation Year and Speciality Training, including the sorts of resources they felt are accorded value in medical careers, how their relevant understanding developed over time, and whether, how and why their aspirations changed. During the second phase, interviewees answered a similar set of questions, focusing most heavily on the period since their last interview, of just over three years. As we will show, earlier experiences remained relevant as barriers become cumulative but an important benefit of this approach was as interviewees who took part in a second interview were further through their education and

**Table 1**  
When the penny drops.

Pseudonym	Sex	Ethnicity	When Interviewed (Stage of Education)
Amani	F	Bangladeshi	2019 (UG2); 2023 (UG5)
Amal	F	Arab	2019 (FY1); 2023 (FY4)
Amelia	F	Black African	2019 (UG2); 2023 (UG5)
Anya	F	Indian	2019 (UG2); 2023 (UG5)
Arun	M	Asian	2019 (ST1)
Damian	M	White British	2019 (UG2); 2023 (UG5)
Ella	F	White British	2019 (UG1); 2023 (UG4)
Eva	F	Mixed Race	2019 (UG4); 2023 (FY1)
Flora	F	White British	2019 (UG3)
James	M	White British	2019 (UG2)
Joe	M	White British	2019 (UG2)
Fatima	F	Pakistani	2019 (FY3)
Huma	F	Pakistani	2019 (UG5); 2023 (FY1)
Jamila	F	Arab	2019 (UG3)
Lucy	F	Bangladeshi	2019 (UG2); 2023 (UG4)
Leon	M	Black African	2019 (UG5)
Maarisa	F	Pakistani	2019 (UG3)
Malik	M	Arab	2019 (UG3)
Nabila	F	Bangladeshi	2019 (UG3); 2023 (UG5)
Nigel	M	Mixed Race	2019 (UG2); 2023 (UG5)
Nicola	F	White British	2019 (UG1)
Omari	M	Black African	2019 (FY1)
Rashid	M	Arab	2019 (FY1); 2023 (ST1)
Reena	F	Pakistani	2019 (UG2)
Sureisha	F	British Asian	2019 (UG2); 2023 (UG5)
Seren	F	Indian	2019 (UG2); 2023 (UG5)
Thanh	M	British Asian	2019 (UG2)
Ursula	F	White European	2019 (ST1) 2023 (ST4)
Zara	F	Pakistani	2019 (UG2)
Zoe	F	White European	2019 (FY1); 2023 (ST1)

training by this point, and could reflect over this longer period. Further, as more had embarked on speciality training, or were closer to doing so, they were able to reflect with more immediacy on related decisions, contributing to stronger conclusions about the effects of socio-economic background on medical career.

##### 4.3. Data analysis

Data analysis was led by the first author though, as findings emerged, both authors regularly conferred, with the latter providing challenge and comment, to help check validity and reliability. Bourdieu did not offer a prescription on method, suggesting this is: 'a manner of asking questions rather than just ideas' (Bourdieu, 1996: quoted in Reay, 2004: 439). Data analysis deployed this open and exploratory approach, guided by Bourdieu's formula for the 'theory of practice,' as outlined below:

$$\text{Practice} = [(\text{habitus}) (\text{capital})] + \text{field}$$

Here, practice relates to what people do, or how they think and act, which results from relations between prior socialisation (habitus), position in the field (the resources and assets with which interviewees entered the field) and the current state of play in the field (when and where these practices take place).

There are several important points to mention here, including that medical education and training represents a complex social space, within which medical schools represent different sub-fields with their own institutional habitus, which overlap with the wider medical field, and with sub-fields represented by specific specialities. We explored what interviewees' stories could tell us about the structure of these overlapping fields, including the forms of capital which define their logic, and the changing alignment between interviewees' location in the field and their habitus. We also approached capitals as mutually constitutive, as for example economic capital tends to structure the social and cultural capital available to interviewees, and in turn their ability to add to and improve their stocks. There is considerable related debate on whether habitus and embodied cultural capital are one and

the same but we follow Edgerton and Roberts (2014: p207) to suggest both represent the internalisation of cultural schemes. However, the capital metaphor particularly shows how embodied cultural capital acts as a valuable asset and status marker, through classed signals such as accent or leisure interests, which offer potential returns in particular fields of social action. Habitus on the other hand underlines how internalised dispositions can function in a dynamic sense as a set of cultural competences or as a 'tool kit' convertible to other forms of capital facilitating occupational 'success.' Habitus suggests then a 'feel-for-the-game' and while this is a notoriously elusive concept as it operates largely outside of conscious awareness, it typically becomes more 'visible' to both researchers and participants as it comes into contact with an unfamiliar field, as actors make sense of informal and written rules, as they interpret their position in comparison with more advantaged peers, and as it translates into observable practices.

Guided by Bourdieu's formula and these ideas, the first author conducted multiple close readings of all 46 transcripts to identify how interviewees' thought about speciality careers and what actions they took in response, or in other words, their practices. While recognising of course that interviewees did not necessarily have access to those terms, this also included considering how these practices were informed by the capital with which they entered the field and their habitus, and how their related strategies changed over time. Analysis took place iteratively, moving between data and extant research. Our primary interest throughout was on social class which interviewees also foregrounded, though they also referred to intersecting characteristics of gender and ethnicity, and personal history. Further attention to these intersections is an important subject for future research, though we include some related discussion here, especially where this helps explain why interviewees did not always adopt precisely the *same* practices.

This process led us to develop a series of initial codes relating to different practices adopted by interviewees as they moved through education and training, which we interpreted theoretically, to consider how these practices were informed by habitus, capital and conditions of the field. During the second phase of analysis these codes were grouped and refined, leading to the identification of four discrete but overlapping themes which we believe offer the most useful and relevant insights into how and why interviewees rule specialties in and out as they moved through education and training. These themes relate first to questions of *fit* and how this affects *confidence* to occupy more competitive careers; second, to interviewees' *more limited feel for a competitive game* on entry to the field which means they often focus on building portfolio relatively late; third, to their *struggles mobilising this knowledge given limited capital stocks*, causing some to adjust their aspirations according to where they believe they can realistically compete; and fourth, to how practices are also informed by *underlying values*, in relation to which interviewees *assert individual agency* but may also make a virtue out of necessity, as they encounter insurmountable barriers in the field. Next, we describe these results.

## 5. Results

In what follows, we describe our four key themes, supporting each with representative quotes along with short vignettes, with the latter helping to illustrate how interviewees made sense of their experiences within the context of their own lives and how obstacles often become cumulative. As this implies a very detailed approach, where necessary we have concealed or slightly altered some details about our interviewees to protect confidentiality, including individual choice of speciality. On this point, interviewees explained that when starting medical school, speciality was typically quite far from their mind, although most had thought ahead to some extent. Their aspirations at this point were tentative but also wide, ranging from obstetrics and gynaecology, anaesthetics and oncology, to paediatrics, acute medicine and psychiatry, with the latter three especially popular and mentioned by over half of them.

Ten interviewees had reached the other end of education and training by 2023, five of whom were in their Foundation Years while five had embarked on speciality training or were about to do so. Of the latter, Fatima was studying for an MSc before taking up a training position in general practice. Omari was in his first Foundation Year and aspiring to a surgical speciality when he took part in this study in 2019 and although he did not take part in a second interview in 2023, was able to confirm he was on track to secure this goal. Ursula and Zoe were training in obstetrics and gynaecology having made this decision towards the end of medical school. Arun was training in anaesthetics in 2019, while Rashid was working in a hospital based medical speciality. Interviewees were then often training in relatively or indeed highly competitive specialities showing this is possible, though our analysis suggests these outcomes were often the result of struggle and compromise. This is of course likely for most doctors but our analysis shows that for aspirant medics from less advantaged socio-economic backgrounds challenges may be quite specific and at times more acute. We start by considering questions of confidence and 'fit.'

### 5.1. Thinking about 'fit': class, confidence and stereotypes

A key factor influencing interviewees' decisions on where they might specialise is perceived 'fit,' which refers here to an anticipated sense of belonging within their future career and a feeling that the specialism is appropriate and suitable for them. 'Fit' is a function of cultural capital in both its embodied form and internalised as habitus, which is closely informed by medical students' social networks in childhood and education.

For example, concerns about 'fit' were partly informed as interviewees wondered whether having no family background in medicine (or indeed other professions) would make them less compatible with *any* medical career, fears which were amplified as they grappled with significant 'culture shock' at medical schools dominated by students from very different backgrounds to their own. As Rashid said about his early years: 'There were a lot, a lot, of students who were middle to upper class. There were times that I felt like, am I in the right place? Is this a career for a working-class student, or have I actually taken a larger bite than I can chew?'

More specifically as it applies to speciality, a key challenge noted by interviewees was that on starting medical school, their knowledge of medical careers was largely informed by experiences and encounters with the profession during childhood, perhaps as a result of their own or a family member's ill-health and/or having watched depictions on media and TV. For example, Eva said she started medical school wanting to be a paediatrician because: 'I'd learned that word from some TV show, and it just stuck with me.' Rashid was initially orientated towards psychiatry having witnessed a family member struggle with poor mental health. Interviewees felt students from more advantaged backgrounds may have had similar experiences but were also likely to have had more extensive personal encounters with the profession, especially those with medical family and friends. One effect identified by interviewees was to offer those peers earlier insights into a broader range of specialist careers which could widen their horizons right from the start. As Huma explained, thinking back to her first year: 'I remember one of my friends talking about nephrology and I was like, "what's that"? There were loads of things I'd never even heard of when I started medical school.' As interviewees lacked personal contacts in the medical profession, their hopes of achieving particular specialities were influenced accordingly. As Huma went on to say: 'You can hardly aspire to things you don't know about.'

However, interviewees acknowledged their early aspirations were also informed by associated stereotypes, and many singled out surgeons as an especially privileged group. Damian was typical here, as he explained having ruled out a surgical career before even arriving at medical school. 'If I thought of surgeons at all,' he said, 'I just thought posh, arrogant... just not like me.' This quote points to social capital as

Damian explained he had rarely thought of surgeons which elsewhere he explained on the basis of never having met one: 'I think if you don't know any surgeons, it's so out there... you just don't even consider it as an option.' Damian also points to how social capital overlaps with cultural capital as he explains that he viewed surgeons as 'not like me,' while in other comments he suggested he also saw surgery as *not for the likes* of people like him. For example, he said: 'I don't know if it's like ... know your limits? But for people who don't have doctors in the family, it's like being a doctor is already a lot and surgery can just seem a step too far.'

As interviewees moved through education and into clinical placements, they described gaining wider and more direct exposure to different fields. The timing of clinical placements differs depending on medical school though typically these accelerate from around students' second or third year, and this can both challenge and/or reinforce earlier expectations and beliefs. For example, Damian described having previously ruled out a highly competitive medical speciality until a clinical placement with friendly and supportive clinicians made it seem: 'Entirely possible... I've gone from thinking: No way that's for me to, I can do that.' On the other hand, encounters with surgical specialities helped confirm his earlier decision to rule these out, again based on his perception of poor cultural 'fit.' 'Whenever I've met surgeons,' he said, 'they've always come from very privileged backgrounds, just their accent and everything... every single rotation, I've just hated it.'

Damian captures how exposure to different specialities does not always challenge underlying and embedded perceptual schemes, which make some specialisms appear less attractive or 'appropriate' than others, partly because the actual demographics of the field can reinforce those perceptions, as an aspect of its underlying structure. The latter could also be informed by negative experiences and hostile cultures, which seemed especially likely in more competitive specialities, and where class intersects with gender and ethnicity. Zoe recalled a difficult placement in orthopaedic surgery, saying: 'I had such negative preconceptions already... and then there were a lot of white middle-class men making slightly racist, slightly sexist comments... [it] just completely put me off.' She also described regular humiliations and slights during interactions with senior clinicians, often based on classed signals suggesting 'difference.' As she said: 'I've been told by a number of doctors informally, in hospitals, that I should change the way I speak... I almost have to hide where I'm from.' A key factor here is as interviewees lack shared social background with more senior clinicians they felt certain forms of embodied cultural capital such as a regional accent were stigmatised as less 'professional,' causing them to feel 'othered' and inferior.

Given these experiences, Zoe described struggling to find any area of medicine where she felt an affinity with fellow practitioners on the basis of social background. During her final years at medical school, she decided to train in obstetrics and gynaecology, partly out of interest but also because higher numbers of female practitioners offered an alternative sense this might be accessible and appropriate: 'I was always interested in women's health,' she said, '[and] clinical placements felt more supportive... it's an area where there's a lot of women.' Where Zoe felt more supported she also felt more confident, which is in turn a context-specific form of cultural capital tending also to reflect the degree of congruence between individual habitus and field. This was another area where interviewees compared themselves to more advantaged peers who they believed on average feel more *entitled* to occupy the professions 'top jobs.' Again, lacking this confidence could be an important factor causing interviewees' to rule out more competitive or higher status specialities, as Ursula explained:

I definitely saw other students at medical school, from more upper-class backgrounds, maybe their parents were doctors or maybe not... but richer, you know, professional. I think they just feel more entitled to those more competitive jobs... people like me, I think we're more likely to think, maybe those jobs aren't for us.

## 5.2. *Feel-for-the-game: formal versus hidden curriculum*

A second factor influencing speciality outcomes is as interviewees entered the field of education and training with a more limited 'feel-for-the-game' in terms of what is valued in competitive specialities and how to 'get ahead.' Again, this relates to their resources and assets on entry, as forms of capital, especially social and cultural, available to interviewees tended to mean they were orientated towards beliefs and behaviours which may be less convertible to field-specific capital enabling 'success,' defined here as access to a more competitive speciality. In particular, interviewees said they often neglected to build portfolio in their early years at medical school, which they later realised could offer more advantaged peers an early head start, from which point they may struggle to catch-up.

One factor which helps explain these practices is interviewees' expectations that medicine would represent a meritocratic career: in other words, one where 'success' would be based on neutral or objective factors, specifically individual talent and capacity for hard work. These beliefs represent interviewees' practical sense or 'feel-for-the-game' during their early years at medical school, derived in part from 'commonsense' assumptions of medicine as a relatively scientific and therefore 'technical' career as Lucy suggests: 'I think growing up you just think medicine, you think science... that's either right or wrong so before you get here it's hard to see how background would come into it once you're in.'

Interviewees explained these perceptions were reinforced through advice provided to them by their teachers at school, and/or organisations aimed at widening participation to medicine. A central aim of these organisations is to ensure students from non-traditional backgrounds for the profession believe medicine is attractive and achievable, and interviewees explained this often involved providing them with reassurance that their background would be irrelevant when it came to their career. Huma had taken part in several such programmes and she explained: 'One thing they always tell you is that medicine is really meritocratic once you're in.' For many interviewees, this was a key factor encouraging them to apply to medicine as while most interviewees believed social class strongly influences who gets *into* medicine, they started medical school believing it would matter much less after that. When he took part in this research in 2019, Malik was at the end of his second year at medical school. He was typical of interviewees at this stage when he said: 'Classes don't really matter when it comes to who would become a successful doctor... once you reach medical school, hard work is everything.'

Interviewees explained how an emphasis on merit was also reinforced during interactions with more senior clinicians and medical educators during their early years at medical school. For example, Arun said: '[They always say] if you perform well and if you work really hard then you shouldn't have any issues.' During this period, interviewees described receiving limited advice on how to navigate career within the formal curriculum, where they were encouraged to focus on academic attainment, while modules on clinical skills underlined the value of characteristics such as empathy, communication and collaboration as critical components of what makes a 'good' doctor. Once again, this is characteristic of underlying assumptions and norms within the medical education field which reflect its structure and, since interviewees' own beliefs around what matters in medical careers were broadly aligned with these expectations, this encouraged continuity in their behavioural repertoires, rather than change. Maarisa was finishing her second undergraduate year when she took part in this study in 2019 and explained that for her, being a doctor had always been about: 'The empathy side of it... the human aspect... it's about hard work and getting on with people.' She went on to say: 'I've got all of that so I don't feel like I have to do anything differently.'

Focusing predominantly on exam success and developing an empathetic approach is then 'rational' given the (limited) information typically available to interviewees at this point and many excelled in these

areas. However, interviewees also described realising over time how peers from more advantaged backgrounds have numerous related advantages, especially where they have field-specific social capital in the form of medical family and friends. A key benefit of starting medical school with existing relationships of this type is that it offers earlier awareness of a wider range of specialities though, as important, is where these contacts are able to offer students advice on how to navigate the field as it is currently structured, as summarised by Joe: 'There's a lot of people who had a lot more access to medic related opportunities or knowledge beforehand. One of my peers, their whole family has done medicine... they get a lot of advice from them.' Where tacit knowledge of this sort is internalised as habitus, this is representative of cultural capital in its more dynamic sense, especially where medical students are motivated to invest their energies in building portfolio.

For interviewees, information about what is valued in more competitive specialisms was largely available through the 'hidden curriculum': informal interactions with senior clinicians and fellow students. Via these sources, interviewees recognise the need to build portfolio, yet these insights tended to come relatively late. For example, for Rashid, clinical placements were when: 'it all connected in my mind,' with 'it' being the need to build portfolio: 'It's conversations with other students, with doctors on the wards... you realise they've got this information from each other or from their Dad but you're totally cut off from that.' Having initially aspired to psychiatry he had discovered quite early on this was: 'not my cup of tea'. Around his fourth year, an encounter with an inspirational lecturer orientated him towards a highly competitive surgical speciality. During his last years at medical school, he made every effort to build networks and conduct research but recognised he had started in his words 'very late' compared to more advantaged peers: 'They had the contacts so they understood this much earlier than me so I'm starting all this about five years later than them... it's still possible but there's a lot more of a struggle for people like us.' It is important to underline that Rashid's difficulties were related less to any individual deficit, and more to the structure of the field where access to the 'right' forms of social capital as a necessary means to improve relative position has arguably been naturalised, and is largely assumed.

Amal also said that clinical placements during her third and fourth year were when: 'the penny dropped... it was things you pick-up, like conversations that other doctors have, you start to piece it together, you know, things like needing to do research.' She turned her attention to building portfolio around this point but like Rashid, knew even then she had also started: 'very late.' She recalled having witnessed other students taking part in conferences and research much earlier on, having rejected the possibility for herself. 'I just thought they were hyper,' she said, 'paranoid and overachieving.' She realised: 'I was totally naïve... by doing nothing, you're already behind in the race.' As she gained awareness of her relative position in the field, this was one factor causing Amal to adjust her aspirations away from her original preference for a highly competitive surgical speciality and towards a less competitive medical option by the time she reached her Foundation Years. While she said she was 'passionate' about the latter she also acknowledged: 'It was definitely forced - I knew I wouldn't get anywhere really competitive.'

### 5.3. Reflexivity and realism: mobilising (limited) capital stocks

As interviewees move through education and training, they typically became more aware of their position relative to more advantaged peers, in terms of relevant knowledge and available resources and assets: in Bourdieusian terms, they become more closely aware of a mismatch between their stocks of capital, dispositions internalised as habitus, and the structure of the field. As awareness of such suggests a certain reflexivity, it also suggests more capacity to think and act strategically in relation to career as interviewees develop a better feel for a more competitive game. However, compared to more advantaged peers, they often described having limited capital with which to *mobilise* this

knowledge and, as they lacked associated agency and power, this was another factor causing some to rule out certain more competitive specialities as they considered where they could *realistically* compete.

One important factor influencing this decision is that despite their best efforts, interviewees were sometimes struggling with academic attainment, representing a form of cultural capital in its institutionalised form, which helps secure distinction from peers. Related struggles could reflect a more limited feel-for-the-game, amplified as lacking shared background they struggled to build relationships with more advantaged peers, leaving them less able to access tacit information and advice, as Amari explained:

After my first year... I realised there was this whole heap of these extra resources out there which was passed on from the older years which I had no clue existed... that's the game of the university system which I didn't realise... it's not about what you know, it's about who you know... people from a medical background or had people they knew from that university, they knew the system and how it worked and how to do well.

Struggles with attainment may also relate to economic capital, as interviewees were often heavily engaged in part-time paid work. This was necessary to support their education, though left them significantly less time to invest in their studies. For example, Seren said: 'I've worked all the way through medical school and that's different from other students... they have a lot more time to focus on their work and I know that's why I've fallen behind.'

Interviewees described how for similar reasons their ability to build portfolio in the form of extra-curricular activities was constrained. Again, a vital factor here was the social capital with which they entered the field, as interviewees repeatedly described witnessing peers with medical family and friends enjoy better access to CV-building opportunities such as research and publications, which were often available through relatively direct forms of nepotism, as Arun and Zoe said:

If you have more family ties, or if you know someone that is a doctor... you know that you can tailor your application to get more points by simply doing a BSc. Or by simply knowing a consultant that you can work on a project with and get a publication out if it... it is things like that which make a massive difference to speciality training. (Arun)

I see it with my friends now, they have all their connections, and it's what gets them doing research, and their names on papers and so on, and it gives them a CV boost. Whereas if you don't have those connections, it's really hard to get all of those things. (Zoe)

While medical students with family and friends in the profession may be especially advantaged here, students from more affluent and/or professional backgrounds may also be relatively well placed, as shared social background with senior clinicians converts to cultural capital, both as an asset and in its more dynamic sense. With respect to the former, shared background can mean shared experiences, which may in turn act as a status marker helping new entrants to the field bond with peers and more senior clinicians. For example, James described witnessing students and senior clinicians build relationships having attended the same private schools: '[They] often talk about schools, what schools they went to... they ask what school did I go to? ... it's how they sort of connect.' These experiences are of course contingent on economic capital, but access to shared experiences and similar educational backgrounds can also suggest the cultural competence and confidence to build *new* networks, which Zoe felt she lacked:

With some of my friends it's just the doctors that they meet on placement and they get on with them particularly well. And often it is because they're from a similar background ... I don't think I've ever met a senior doctor on placement who I felt like I could relate to... I just don't really know how to go up to someone and make that small talk and start that networking process.

Economic capital comes in once again as interviewees engaged in paid work to support their studies, felt they had less time than their peers to invest in extra-curricular activities which might demonstrate commitment to speciality, as Damian explained:

To develop a portfolio... that involves things like, you know, staying late, collecting data, and being available at the drop of a hat to see an interesting patient or to assist with surgery... I can't stay until eight o'clock because I've got to go and [work] to actually fund my studies and live, whereas [other students] don't have that.

More financial support also means more opportunities to take part in electives and internships which can be career building, but which for interviewees were relatively out of reach. As Maarisa said: 'There's an optional clinical placement module where a lot of people will go to different countries... friends have got their parents to finance it... things like that make a difference in terms of their application.'

These challenges do not of course remove all agency and interviewees' accounts were characterised by resilience, persistence and determination. Nevertheless, as they struggled to access and mobilise key assets and resources, interviewees described once again how they adjusted their aspirations in response, for reasons other than preference. For example, Jamila was in her third undergraduate year when she said: 'My background has affected what kind of career I want... when I think about my career options, I disqualify a lot of them.' For her, this included prestigious research careers. 'A lot of people in my year have been doing research and they do have connections', she explained, 'but I don't have that... if I had the right connections, I would be able to get in.' Jamila foregrounds social capital here. Other interviewees described how alongside challenges outlined above, limited economic capital was especially important as it meant they often needed to expedite their training to secure a salary, influencing them towards specialities with shorter training routes. This was one reason why Joe had 'never even considered' surgery. 'I can't afford that,' he said, 'so you just sort of rule those jobs out.'

An important contextual point is that in the UK medical profession, competition for *most* specialities has become increasingly intense in recent years. This suggests challenges for doctors from many different backgrounds but interviewees explained how for them, these challenges can be especially acute, including as by the time they reach their Foundation Years most were struggling with accumulated debt. Combined with concerns about the strength of their portfolio for reasons we have explained, this could make applying for highly competitive specialities seem especially high risk, if it meant they were less likely to secure *any* job. In these circumstances, adjusting their aspirations towards less competitive options, or perhaps jobs in regions with more shortages, represents a rational response. These are important factors encouraging students from less advantaged backgrounds towards areas such as primary care given financial pressures which on average, may not be as pressing for more affluent peers, as Huma explained:

There's this build-up of risk. Nearly all jobs are competitive now and people like us, we need a salary, we need to know we are going to have a job, and we're in so much debt... so even if you get to this point [aspiring to a competitive speciality]... Foundation Years and even speciality training can be when you say: "I've had enough."

#### 5.4. Values and virtues: asserting agency (within constraints)

In this final empirical section, we want to address questions of *values*, which previous literature has suggested have an important influence on the direction of speciality careers, including as doctors from less advantaged backgrounds are sometimes considered more closely aligned with community orientated or 'prosocial' careers. We have illustrated how these outcomes might have alternative explanations, as interviewees' capital stocks on entry to the field narrow the speciality options that seem achievable to them and as they understand the rules of

the game relatively late. Of course though, there is considerable scope to exercise preferences within (or perhaps despite) these obstacles, in relation to which our data confirms values can play a central role, though in ways which suggest both choice *and* constraint.

To help illustrate related complexities, we start by considering Ursula's story, which is especially representative of this theme. Ursula had attended an elite medical school, dominated by students from more advantaged backgrounds, who she explained were encouraged by educators to take up more competitive and prestigious careers, especially in research. She rejected these routes saying: 'I'm better at the clinical practice of medicine.' In her final year, she had settled on obstetrics and gynaecology, a choice she explained on the basis of interest and aptitude, and the possibilities for teamwork and collaboration. 'I just got lucky' she said, 'and found my thing.'

Superficially at least, her journey might suggest class played a limited role in her speciality decision and Ursula only considered how the two might relate in response to a direct question on this subject towards the end of her first interview. She asked for time to think and gave the following response: 'When I think of how I spent my summers... compared to some of my classmates, lots of them would go on research projects... for me, it was much more important to spend that time with my family.' She went on to compare herself to peers from more advantaged and medical backgrounds saying: 'I do sometimes wonder if there's also just a different value system that might come into play... having a more prestigious career might matter more to them. You know, like just being a doctor isn't enough?' This comment points at classed habitus as Ursula hints that students from privileged backgrounds are more likely to arrive at medical school having already internalised dispositions more closely aligned with attributes valorised in fields with more competitive entry and an appetite to engage in related activities to secure distinction through portfolio. Put another way, for students from non-traditional backgrounds simply qualifying as a doctor means status and upward mobility is assured, regardless of speciality, whereas they explained others are more likely to have been socialised to value the symbolic capital provided by higher status roles, and to act accordingly. Yet Ursula also suggested these aspirations might come at the expense of wellbeing given that in her view specialities such as surgery represent: 'an awful job.' For her, she explained: 'It was nothing like that – my family just want me to be happy. That meant I could do what I want.'

Ursula frames her background as less a problem and more a resource, as it offers more scope to reject extrinsic motivators such as prestige and pay, in favour of personal preference when selecting speciality. Others agreed, showing how their particular background offered them certain advantages compared to more peers, as Ella explained:

Maybe if I was from a background like of private school... there's more pressure for high achieving prestige maybe that would make me care more about being... something that has high social standing... my parents are just, you know, whatever you do, we're happy. We don't really care... I don't really want to be like that, always fighting to get ahead.

Interviewees like Ella and Ursula felt they had *more* agency than notionally more advantaged peers, which also underlines how background represents the frame through which interviewees view the world, as learned preferences are internalised as habitus. While the latter influences the direction of careers, medical students from less advantaged backgrounds are not merely victims of circumstance, and interviewees were able to exert preferences in a range of directions. For example, Omari fought 'tooth and nail' to access his highly competitive surgical speciality, motivated by background in a different sense. 'Coming as a kid from low socio-economic status,' he explained, 'it feels like you have been given this golden ticket to leave this life you were living before.'

Nevertheless, for many interviewees a similar outcome continued to seem not only impossible but also less attractive, including as the challenges we have described meant some were struggling with their



mental health. This could be another factor encouraging them to focus on simply getting through medical school rather than making discretionary efforts to focus on extra-curricular activities and build portfolio. Flora explained for example that: 'Medical school is really hard and then there's life, like, I've been supporting my family... so now, my goal is just to get out with my mental health intact.' She acknowledges here how capital stocks, especially economic, influenced how she thought about career and how she acted in response. She went on to say: 'I've taken a passive approach to portfolio... I'm definitely disadvantaged compared to friends who've done more than me.' She justified these actions, making the following points: 'I've never seen myself in a really competitive speciality... things like that don't really matter to me... for me, medicine isn't really about getting to the very top, it's more about helping other people out.'

This tendency to prioritise community over competition was widespread amongst our interviewees. While this may partly reflect underlying values, we suggest it also hints at a tendency to make a virtue out of necessity in the face of seemingly intractable barriers originating in the structure of the field. We can return to Rashid and Jamila in relation to these points, both of whom adjusted their expectations from more to less competitive specialities as they negotiated education and training. As explained, for Jamila this happened quite early on as she disqualified competitive options such as surgery. While she acknowledged the role her background had played, she also sought to rationalise this outcome according to her personal definition of 'success':

If your definition of 'success' is going into a prestigious career and how many people respect you, having higher pay, then building your CV from the get go and trying to get into those things is successful... for me, it's getting into medical school, having good mental health by the end of it, choosing a career that genuinely is interesting to you.

Rashid had applied to his preferred surgical speciality following his Foundation Years but was not offered a job. When interviewed in 2023, he attributed this to a number of factors, though he thought one might be a weaker portfolio compared to peers, given what he noted again was a: 'very late start.' In his words feeling 'broke and burnt out', he was now training in a (slightly) less competitive medical speciality which he called the 'best decision of my life,' while also acknowledging that with more time and money he would have applied to his first preference: 'again and again.' Where this tendency towards post hoc rationalisation is misunderstood, we suggest this could lead medical educators and policymakers to believe social stratification is a more straightforward reflection of preference than is necessarily the case. A final though related point is that interviewees often explained the challenges they face are invisible to more experienced clinicians and privileged peers who are able to believe that access to speciality is more obviously the result of commitment or 'passion.' Amal was representative of many other interviewees when she said: 'What they don't understand, is that for us passion is not enough.'

## 6. Discussion

Our study has explored how social class influences speciality careers in the UK medical profession, thinking particularly about the balance between choice and constraint. We have used Bourdieu's (e.g. 1986, 1990) theory of practice to analyse the complex social structures and relationships which characterise the field of medical education and training and which influence medical students and doctors' practices accordingly. Our major contribution is to the sociology of medical education as our study is the first to go beyond relatively objective measures such as income and education to describe both how and why social class influences speciality outcomes, using qualitative data, and in considerable depth. Previous studies of social class in medicine have suggested Bourdieu's framework is outdated in an age of 'reflexive individualism' (Robb et al., 2007), but our analysis demonstrates that his 'theory of practice' offers a robust sociological framework to explain

the complex interplay between social structures, individual habitus and stocks of capital, which influence speciality outcomes in sometimes subtle but generally quite significant ways.

As Edgerton and Roberts (2014: 206) write, one analogy often used to understand the interrelation of capital, habitus, practice and field is of a card game, where the game itself is the *field* of interaction, the cards held by each player represent their stocks of *capitals*, the approach they take to playing their cards their *practices*, which are in turn influenced by their preferences, or *habitus*. The value of different cards and the best way to play them varies depending on the rules of the game and the conditions of the field, and on the individual player's knowledge and skill. While this analogy is itself simplistic it is nevertheless useful to summarise how compared to peers, the most advantaged of whom are likely to be those with access to both financial resources and medical family and friends, medical students from less advantaged backgrounds enter the field with more limited knowledge of its rules, a less advantageous set of cards with which to play and perhaps, a different set of preferences. Over time, they can and do learn those rules, which can be leveraged to improve their hand, especially in the form of portfolio. Overall though, accumulated stocks of capitals on entering the field offer them less agency and power, which may further inform and perhaps undermine their appetite for the game, as the *affective* component of habitus.

In making these points, we are cautious to avoid reifying distinctions between 'good' and 'bad' jobs in terms that have more meaning to researchers than actors in the field. We underline that where medical students from any background choose more community-orientated and/or less competitive roles, this should not be seen in negative terms, including where some actively prioritise alternative values over more traditional versions of 'success.' However, we have also illustrated how faced with barriers and obstacles, doctors from less advantaged socio-economic backgrounds are sometimes forced to make a virtue out of necessity. As such, while allowing for both choice *and* constraint, our core argument is that the structure of the field of medical education and training means speciality outcomes are sometimes inequitable and at times inefficient, as doctors from less advantaged backgrounds may have limited access to the most competitive specialties, for reasons other than preference, aptitude or ability.

These findings have important practical implications not only for patients, but also for the profession and individual practitioners. For example, our research aligns with studies in wider labour markets showing that as a result of prior socialisation or 'habitus' people from less advantaged or 'lower' status socio-economic backgrounds are more likely to select community orientated or 'prosocial' careers, while those from more advantaged backgrounds tend to select more 'autonomous' or individualistic careers. While this might suggest 'choice,' it is also significant that prosocial careers are generally assigned lower status and are typically less well paid (Fang and Tilcsik, 2022). Similar patterns may then help to explain medicine's class pay gap but we also underline potential for circularity here: in other words, it is not only that people from less advantaged backgrounds are found in relatively high numbers in 'lower' status jobs but this association could also mean the status assigned to these roles is additionally undermined. Where practitioners lack status, they may have less influence and power to advocate for the resources they need, and therefore to provide patients with safe and effective healthcare.

A related question for the profession is the extent to which social stratification in medicine has an underlying purpose. We could adopt a different theoretical lens here, to ask whether the patterns we identify represent forms of social closure, where occupational elites use formal and informal mechanisms to exclude aspirant professionals defined as 'non-eligible' on seemingly legitimate grounds to help protect and defend their special status and rewards (Bolton and Muzio, 2008). Closure mechanisms are often most intense where existing privileges are under threat, perhaps where the number of qualified candidates expands in relation to available positions and/or as working conditions

deteriorate, both of which are pertinent to the UK medical profession today (e.g. NHS England nd). Understanding these processes in further depth is an important goal, and we make additional suggestions for future research as we discuss the strengths and limitations of our study next.

### 6.1. Strengths and limitations of the study

Our study has offered robust insights into the causes of social stratification in the UK medical profession using qualitative data but while this accounts for the complexity and ‘messiness’ of ‘real’ life, there are certain limitations. One is that available statistical data from which we have built offers insights into broad patterns of social stratification but could benefit from additional detail. Most important perhaps, statistical research could explore how socio-economic background intersects with gender and ethnicity to affect both speciality outcomes, and the rate and speed of career progression. Statistical research could also explore how the medical school doctors attend might affect the impact of socio-economic background and/or compare outcomes for doctors from medical and non-medical family backgrounds, to help isolate the influence of related forms of capital and habitus. As these patterns are revealed, this would inform suitable directions for further qualitative research, which is important not least because our study was relatively small-scale. Future research could use a wider sample group, to also include participants from a range of backgrounds to compare similarities and differences in terms of how speciality decisions are made. Again, this might also include participants at a wider range of medical schools, to investigate how institutional habitus interacts with individual habitus to influence speciality outcomes (Cleland et al., 2014; Erikson et al., 2013).

We have also sought to demonstrate how medical education and training is fundamentally classed, so that differential outcomes are less the result of individual capital deficits and more obviously the result of exclusionary and unfair processes which are deeply embedded within the structure of medical education and training. This finding points at certain similarities with systemic racism, which can be defined as processes embedded in law, policies and practices of society and institutions which provide advantages to racial groups deemed as ‘superior,’ while oppressing or otherwise disadvantaging neglected racial groups viewed as ‘inferior’ (e.g. Feagin, 2013). We have illustrated how similar hierarchies are evident in medical education and training and indeed the wider profession, as doctors from less advantaged backgrounds may be positioned as ‘lesser’ compared to more advantaged peers, or at least made to feel as such. Understanding how these barriers may be addressed is likely to require attention not only to the practices and preferences of doctors on the ‘supply-side’ but also to the attitudes and behaviours of those on the ‘demand-side,’ in other words, more senior clinicians and managers responsible for hiring and promoting doctors. In the meantime, we conclude by briefly considering what our study tells us about the potential for more progressive change and how this might be achieved.

## 7. Conclusion

Where inequalities in medical education have been addressed by medical educators and policy makers to date, one focus has been on addressing the academic attainment or awarding gap (e.g. Woolf, 2020). Clearly, this is an important goal, though where it treats qualifications and credentials as relatively neutral forms of ‘human capital,’ could suggest that where differential attainment is reduced or eliminated, speciality jobs can and will be allocated on more ‘objective’ grounds. However, we have demonstrated that speciality positions are allocated on the basis of both educational and non-educational factors. In this sense, we particularly build on Lareau and Weininger (2008) seminal work which underlines how in many areas of social and professional life, technical ability and social competence are inseparable components of

‘success,’ both of which are derived from social background and based on components of capital, transmitted across generations. Against this backdrop, the notion that ‘merit’ can ever be assessed in neutral terms is mistaken yet generating this impression may offer existing occupational elites a certain legitimacy as it suggests underlying structures are for the most part ‘fair,’ and as such, their superior position is justified.

One response might then be for medical educators, policy makers and professionals to challenge this ‘myth of merit’ with more energy, to recognise that ‘success’ will continue to require both cognitive and non-cognitive skills, yet paying closer attention to what has become arbitrarily valued in relation to both as markers of ‘excellence.’ Practical interventions might include ensuring that information on how to navigate career is provided to all students within the ‘formal curriculum’ to help level-the-playing-field in terms of knowledge and information, while opportunities to mobilise this knowledge and acquire new forms of social and cultural capital via internships and electives, or work experience and opportunities for research, could be advertised more formally and ideally paid. Greater attention could also be paid to the ways in which economic capital influences speciality outcomes, with for example financial support being made available to students from less advantaged socio-economic backgrounds to help them access specialities with longer training routes.

These changes are though relatively piecemeal while, as noted, the challenges we have identified are deeply embedded in the structure of medical education and training, and arguably reflect its history as one of the original ‘gentlemanly professions’ (Friedman and Laurison, 2019), which having generally been populated by the *already* affluent, is structured accordingly. Some recent changes have of course been made. The recently introduced Preference Informed Allocation system for Foundation Year training programmes may assist with some of the challenges outlined here, as it reduces the emphasis on extra-curricular activities and achievements, which we have shown may be more difficult for students from disadvantaged backgrounds to acquire. It is though important to note that this change has been strongly resisted by some interest groups, especially where it has been extended to Speciality Foundation Programmes, which offer access to prestigious academic research careers. The British Medical Association (BMA, 2024) argues for example this does not sufficiently recognise the discretionary efforts some students have already made to demonstrate their interest in and aptitude for particular specialities. This is one factor among many which underline how medical education and training as a field of practice is characterised by conflict and struggle, and where institutions will be required to become increasingly agile as they juggle the expectations of traditional incumbents with the particular needs of newer entrants. One problem here is that changes to selection processes have been made in the absence of others which are outlined above, yet responding to challenges of equity and efficiency is likely to require a systemic and joined up approach, stretching to areas such as funding models and length and style of training routes.

The appetite for more radical structural reform of this type is uncertain, as is who might take responsibility for driving it. Bourdieu (1996: 5) argued educational institutions generally play ‘a critical role in the reproduction of the distribution of cultural capital and thus the reproduction of the structure of social space,’ and medical schools have a part to play. Yet since they compete for resources, including privileged access for their students to what are currently defined as more ‘prestigious’ jobs, institutions may resist changes perceived to threaten these advantages, or which are perceived to lead to doctors becoming deskilled. Addressing the issues raised by this study is also likely to require a collaborative approach across multiple institutions, yet this is more challenging perhaps as this is a complex social space where arguably, not all stakeholders are aware of the nature of social stratification or its implications. Our intention for this study is that it offers one platform from which to stimulate further conversations, to help ensure medical education and training is suitable for practitioners from every background, for the profession at large, and for all its patients.

## CRediT authorship contribution statement

**Louise Ashley:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Ian McDonald:** Writing – review & editing, Writing – original draft, Validation, Formal analysis.

## Data availability

The data that has been used is confidential.

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