Medical School Choice in the United Kingdom

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Submitted for the degree of PhD in Medical Education

I, Eliot L Rees confirm that the work presented in my thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

Widening participation in medical education is critical for fostering a diverse medical workforce that reflects the populations it serves. Despite efforts to increase access, medical schools in the UK vary significantly in the socioeconomic composition of their student cohorts. Understanding how applicants from different socioeconomic backgrounds choose which medical schools to apply to may shed light on these disparities and inform strategies to promote equity.

This thesis explores the choice behaviour of medical school applicants through a large-scale national qualitative interview study. Participants, including both applicants and recent entrants, were purposively sampled from eight UK medical schools to ensure representation from a range of socioeconomic and geographical backgrounds. The analyses were sensitised to theories of capital and choice.

Participants described seven key priorities when considering medical schools: course style, proximity to home, prestige, medical school culture, geographical location, university resources, and whether they felt they would 'fit in'. While there were similarities across socioeconomic groups, such as the universal appeal of prestige, differences emerged in how participants prioritised and conceptualised factors. Applicants from non-traditional backgrounds often emphasised practical considerations, such as proximity to home or maximising acceptance chances, over aspirational attributes like prestige and course style.

The study identified five types of strategies adopted by applicants: maximising priorities, playing to strengths, the Scottish approach, exhaustive comparison of entry requirements, and contextual admissions. The strategies participants used were shaped by their perceptions of their resources and constraints across four types of capital: economic, intellectual, social, and positive psychological.

By offering a detailed exploration of decision-making processes and drawing on established theories of choice, this thesis contributes to the ongoing dialogue on equity in higher education. It concludes with practical recommendations for policymakers and institutions to address disparities and ensure equitable opportunities for aspiring medical students, regardless of their socioeconomic background.

Impact statement

This thesis explores how applicants from different socioeconomic backgrounds navigate the complex process of choosing medical schools. It provides novel insights into the factors influencing these decisions. The findings reveal that applicants from lower socioeconomic backgrounds do feel well-suited to careers in medicine, contrary to earlier research. This shift is likely attributable to targeted widening participation schemes that have successfully changed perceptions about medicine as a viable career. However, in this study applicants reported facing significant hurdles in obtaining offers and meeting the terms of those offers, with poor economic, social, and intellectual capital compounding these challenges.

Despite the increasing implementation of contextual admissions and widening participation schemes, many eligible applicants in this study were either unaware of these opportunities or reluctant to use them. A key reason was the perception that applying through these routes constitutes a "handout," with applicants preferring to gain entry on their own merits. This misunderstanding fails to recognise that such schemes aim to address systemic disadvantages and level the playing field. Conversely, applicants from traditional backgrounds expressed feelings of being unfairly disadvantaged by their ineligibility for contextual admissions, a phenomenon I describe as "reverse disadvantage," which is a novel contribution to the medical education literature.

The study highlights that some applicants are not always as strategic in their choices as they could be. Limited access to complete and accurate information constrained their ability to make decisions that might have maximised their chances of receiving offers. This emphasises the need for better guidance from school teachers and more transparency from medical schools about entry requirements and admissions processes.

Insights from this thesis can guide policymakers and medical schools in refining contextual admissions and widening participation initiatives. The rational for widening participation is often cited as to create a workforce that is representative of the population it serves, and medical schools have targets to recruit for different socioeconomic strata. This can be misinterpreted as filling quotas rather than trying to recruit from the full talent pool and recognising attainment in the context in which it was achieved. Improved communication and transparency about the intention of these programmes can address misperceptions and ensure that all eligible

applicants, regardless of background, feel comfortable to access available opportunities.

This research adopts a novel perspective to explore ongoing challenges and opportunities in widening participation in medical education through examining medical school choice. By addressing misconceptions about contextual admissions, improving access to information, and refining strategies to support applicants from lower socioeconomic backgrounds, the findings from this thesis have the potential to inform policy and practice in medical school admissions to the benefit of applicants, medical schools, and the wider healthcare system.

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Chapter 1. Introduction

Who is admitted to medical school is of critical importance because, given the low rates of attrition (1) and the entitlement of graduates to GMC registration (and a provisional license to practice), these individuals will ultimately form our future medical workforce. Thus, the selection process for medical schools is of great importance(2). Admissions to medical school is a lengthy and complex process that does not yield equitable outcomes for individuals from different socioeconomic backgrounds (3). Much of this inequity originates before applications are even submitted. As highlighted in Cleland's study of medical school admissions deans, medical schools "[…] can only select from those who apply" (2). Disparities in educational attainment from a young age likely contribute significantly to the underrepresentation of medical students from lower socioeconomic backgrounds (4). Additionally, there are significant disparities in the proportions of applicants from lower socioeconomic backgrounds admitted at different medical schools (3). This has been rarely explored in the literature. However, a study by Steven and colleagues (3) identified an almost fourfold variation in the proportion of applicants and entrants whose parents were in the lowest two of five occupational categories, as measured by the National Statistics Socio-Economic Classification (NS-SEC 4: lower supervisory and technical occupations, and NS-SEC 5: semi-routine and routine occupations) among the 22 medical schools they studied. This raises questions about how applicants from different backgrounds choose which medical schools to apply to and whether this impacts their chances of securing a place. This is a potential source of inequity that has hitherto been under-investigated.

Most admissions research within medical education focuses on the psychometric properties of admission procedures, with relatively little attention given to applicant perspectives (5). In higher education more broadly, it is recognised that more informed choices can enhance students' success and assist with social mobility (6). In the UK, supporting applicant choice of higher education institution has become a national imperative (6). In the highly competitive field of medical school admissions, the importance of choice of institution to apply to is even more pronounced, as the potential consequences extend beyond under-match (where applicants from the lowest socioeconomic groups are less likely than their more privileged counterparts with the same grades to apply to the most competitive universities) to the significant risk of receiving no offers at all. It is therefore critical that applicants can make well-informed choices (7). Despite this, applicant choice of medical school has been the

subject of little inquiry. Given the challenges faced in widening participation in medicine and the likely importance of choice in determining success, understanding the choices of applicants from different backgrounds is of significant interest.

One of the few studies that has looked at medical applicant choice in the UK, was a qualitative study of applicants to medical schools in 2003. The authors identified three major medical school factors influencing applicant choice: academic features, location, and intangibles (8). Applicant factors, such as socioeconomic and educational background, were not considered in that study, yet it is likely that they are important: findings from the broader higher education context indicate the importance of prestige and geography in applicants' choice of higher education institution and highlight differences in priorities amongst students from lower socio-economic backgrounds (7, 9, 10).

Over the past 15 years there have been a number of significant changes in admissions to UK medical schools. These include the introduction of the UK Clinical Aptitude Test (UKCAT), now called the University Clinical Aptitude Test (UCAT) (11), a selection test used by the majority of medical schools with notable exceptions Oxford, Cambridge, UCL, Imperial, Brighton & Sussex, Leeds and Lancaster which until recently used the BioMedical Admissions Test (BMAT); the introduction of Multiple Mini-Interviews (MMIs) (12, 13) a new type of interview now used by a large number of medical schools; the increasing focus on widening participation (14) including the introduction of formalised contextualised admissions (15) and the expansion of medical school places.

This thesis aims to answer the research question:

> **How do applicants from different socioeconomic backgrounds choose which medical schools to apply to?**

In this first chapter, I will discuss the imperative for widening participation, provide an update on the current state of participation by socioeconomic background, examine reasons for under-participation among those from lower socioeconomic groups, review interventions aimed at widening participation, and discuss the importance of considering applicants' choice of medical schools.

In Chapter 2, I will examine the procedures used for selection at UK medical schools. I will approach this from the perspective of the chronological journey an applicant goes through. I will discuss secondary education, work experience, different medical school choices including various course types and broad differences in curricula, admissions procedures, and application ratios and outcomes.

In Chapter 3, I will consider theoretical models of how individuals make choices that serve as a conceptual framework for this study. I will start by discussing economic theories of choice, including neoclassical and behavioural economic theories, before describing applied models of choice for consumer behaviour and higher education choice.

In Chapter 4, I will outline the methodology and methods employed in this research, and in Chapter 5 will provide an overview of the participants in this study.

In Chapters 6 to 8, I will present the results of my research. In Chapter 6, I will discuss the attributes of medical schools that applicants said guided their choices, and how this varies by socioeconomic background. In Chapter 7, I will discuss applicants' self-perceived resources and constraints regarding applying to medical schools, using a theoretical model of capital that includes economic, intellectual, social, and positive psychological capital as a framework. In Chapter 8, I will explore the interrelation between what applicants want from a medical school and their self-perceived resources and constraints, and construct a typology of different strategies for choosing medical schools.

Chapter 9 will provide a summary of the main results of this thesis, explore these results in relation to existing literature, discuss the strengths and limitations of the study, and make recommendations for future practice, policy, and research.

1.1 The argument for wider participation

There is longstanding inequity in access to higher education both in the UK and internationally, with the most pronounced disparities seen in medicine (16). In his 2012 progress report '*Fair Access to Professional Careers',* Milburn, then Chair of the Social Mobility and Child Poverty Commission, fiercely criticised the medical profession for its inadequate efforts to address the dominance of those from higher socioeconomic backgrounds (16). In response, the Medical Schools Council, the representative body for UK medical schools, established the Selecting for Excellence project and set ten-year targets for UK medical schools to increase representation of students from lower socioeconomic statuses (17). Widening access to the medical profession to those from 'non-traditional' backgrounds has since become a key political and research priority with further research into widening participation recommended in the 2018 Ottawa consensus statement on selection and recruitment to the healthcare professions (18).

The groups that are underrepresented within the medical profession vary by country and are shaped by historical, social, and cultural contexts (19). In Canada, socioeconomically disadvantaged individuals (especially those first in family to higher education), Aboriginal peoples, Francophone people, women, people with disability, and those from rural areas are underrepresented in higher education (20). Canadian medical schools focus on widening participation to Aboriginal peoples and those first in family to attend university. Within the USA, a wider ethnic disparity has led to a targeted efforts to widen participation by ethnicity (21). In the UK, there is reasonable representation of different ethnicities and genders within medicine (16). We do not face rurality on the same scales as Canada and Australia. However, there are significant disparities in the number of applicants and entrants to medical schools by socioeconomic backgrounds.

I will first discuss why wider participation is important before outlining recent data on the state of participation. The mission to make medicine more accessible and inclusive is driven by societal, economic, and educational factors (14). The arguments for widening participation to medicine are manifold and include:

To ensure equity and promote social mobility. Fundamentally, widening participation seeks to address inequalities in access to undergraduate medical education, ensuring that individuals from all backgrounds have equitable opportunities to pursue careers in medicine and achieve their full potential. By widening access to medical education for historically underrepresented groups, these individuals can become more socially mobile. Social mobility refers to the ideal that every individual should be able to achieve their full potential and rise through social classes without being constrained by the socioeconomic group they were born into (22). In the UK, efforts have been focused on widening participation by socioeconomic background. This is in part to redress longstanding systemic inequalities. Findings from the Millenium Cohort Study of 12,000 children born in 2000 to 2002 have demonstrated that children from lower income backgrounds were 10 months behind their more privileged peers in school readiness tests by the age of three (23). This educational disadvantage worsens through childhood and secondary education (24).

To utilise the full talent pool. There is an argument that there may be many suitable and able young people who do not consider a career in medicine to be possible for them (25). Widening participation therefore aims to remove barriers to careers in medicine to attract the full pool of potential talent in order to create the best possible doctors (17). This may be particularly important as the UK Department of Health and Social Care has ambitions to double the number of medical student places (26).

To train a workforce representative of the population it serves. The British Medical Association have long asserted that the health workforce should be representative of the UK population (27). This is borne of the idea that a socially and culturally diverse workforce will be more culturally competent and will provide better healthcare. Much of the research supporting this assertion has explored this from the perspective of ethnic diversity, however, it is reasonable to assume that the principle is transferable to diversity of social class.

To produce graduates matched to workforce needs. There is some research that suggests that individuals from deprived background who enter medical schools are more likely to return to their communities after their training to serve these populations which are currently underserved. Similarly, UK studies suggest that students from lower socioeconomic backgrounds are more likely to train as general practitioners (28, 29). The general practice workforce is recognised to be in crisis with regards to recruitment and retention (30). Consequently, these findings have been influential in shaping widening participation policy.

To benefit the economy. There are economic arguments for widening participation to higher education in general, both at national and individual levels. For the nation, a higher proportion of graduates is argued to lead to greater productivity and faster economic growth (31). Improving social mobility through widening participation is predicted to result in up to £1.3 trillion in GDP growth over a 40 year period (32). These arguments are perhaps less applicable to medicine, as it is likely that those with the high academic attainment required for medicine will pursue other university education if they ultimately decide not to apply for medicine or are unsuccessful.

Despite these strong arguments for widening participation, there is significant variability in how medical schools implement this policy. While some medical schools appear genuinely committed to widening participation, others seem to offer only superficial support. A study of UK medical school admissions deans revealed several concerns regarding widening participation (2). Some admissions deans were mindful that admitting applicants with lower academic attainment could reduce the average entry tariff (average secondary level education attainment of entrants to the programme) which is an important factor in university league table rankings. Some expressed concern that non-traditional applicants might struggle academically, leading to higher attrition rates, which could damage the institution's reputation and result in financial losses from tuition fees and government funding. There were also concerns that reducing entry requirements may be seen as lowering the standards for the profession. Finally, some felt that prioritising non-traditional applicants could

unfairly deprive traditional applicants of places, and certain widening participation initiatives were viewed as "social engineering." Prestigious medical schools with strong international reputations appear to be less committed to widening participation than newer medical schools (2).

1.2 The state of participation

It is well recognised that students from lower socio-economic backgrounds and those who attended state funded education are underrepresented in UK medical schools (17). Data from 2013, revealed that eighty percent of UK applicants to medical school were from students at 20% of UK high schools, with 50% of high schools having not sent any applicants to medical school in recent years (33). Furthermore, an analysis of UK-domiciled applicants between 2009/10 and 2011/12 demonstrated that there were thrice as many applications from students in the most affluent quintile according to the index of multiple deprivation (IMD; a composite measure of deprivation in geographical areas in the UK (34)) compared to those in the most deprived quintile (36.4% and 12%, respectively) (3). A quarter of applicants were from independent / fee paying schools, whereas only 6% of school children are educated in the independent sector (17, 35). Over half of successful applicants in these three admissions cycles were from the most affluent IMD quintile (36).

Initial progress against widening participation goals had been slow. Data from 2007 to 2018 demonstrate that individuals from areas where the fewest young people go on to pursue higher education (defined as quintile 1 of the Participation Of Local Areas (POLAR) classification) were significantly underrepresented in both applicants and entrants to UK medical schools. During this period, only 6% of applicants and 4% entrants from POLAR quintile 1 (the most deprived quintile where fewest young people progress to higher education). This is in stark contrast to the 32% of applicants and 43% of entrants from POLAR quintile 5. While the absolute number of applicants from more deprived backgrounds is lower, those that do apply are also less likely to be offered a place. One in 4.8 applicants from POLAR quintile 1 are successful compared to one in 2.4 from quintile 5 (4). Data from the Medical Schools Council demonstrated that over 40% of entrants to medical school in 2015 had parents in higher managerial occupations (according to the National Statistics Socio-Economic Classification (NS-SEC)) compared with 10% of the population in these positions according to the 2011 UK Census (37).

Recent years have seen greater progress. This is likely to be attributable to the concerted national and local efforts to widen participation (see Section 1.4).

Nevertheless, the most recent data published by the General Medical Council (for entrants to standard entry medicine courses in 2021) demonstrates there is further work to do:

- A fifth (21%) had attended private funded schools.
- Twice as many came from POLAR 5 (42%) compared to POLAR 1 & 2 combined (19%).
- Three quarters had parents who had been to a university, whereas only a third of the UK population had.
- There were as many entrants from IMD quintile 5 (32%, least deprived) as quintiles 1 and 2 combined (30%, most deprived).

Data from the Medical Schools Council Selection Alliance demonstrates that the number of applicants to medicine has significantly increased over recent years (38). Applications to standard entry courses in 2021 were up 32% compared to 2018. This has been predominantly driven by an increase In UK domiciled applicants and those attending state funded schools. The IMD quintile that has seen the most significant increase in number of applicants is IMD1, the most deprived quintile.

1.3 Reasons for under participation

In order to work towards wider participation in medicine, we must first understand why students from these non-traditional backgrounds are underrepresented in medicine. A number of possible explanations have been proposed.

Not interested?

It may be that young people from non-traditional backgrounds are not interested in pursuing careers in medicine; however, this is unlikely to account fully for the disparity. In a survey of 2287 children aged 10 and 11 entering state funded comprehensive secondary schools in 2012, 9.8% reported that medicine was the career they were most interested in (39). This suggest that a lack of interest in the profession is not the main driver. Individuals' motives for studying medicine have been well explored in the literature (40). A recent systematic review concluded that the main motives for applicants in high income countries were intrinsic interest in science and medicine and a desire to help others (40). McHarg found that some individuals with a desire to study medicine (and who were ultimately successful in doing so) had been dissuaded by their teachers including advising them they were not 'doctor material' (41). Therefore, some may feel that they are not suitable.

Not suitable?

It may be that children from lower socioeconomic groups are interested in becoming doctors but do not see a career in medicine as appropriate for them. In their seminal study of academically capable school pupils from diverse backgrounds in London, Greenhalgh *et al*. found striking disparities in perceptions of a medical career amongst 14–16-year-olds from different socioeconomic backgrounds (42). Students from lower socioeconomic backgrounds viewed medicine as a field reserved for 'posh' individuals and believed that their own backgrounds would hinder their chances of being admitted to medical schools and succeeding in the course (42). Several studies have since explored this phenomenon.

Research conducted in Australia revealed that academically capable students from state schools believed they were "smart enough" for careers in medicine and did not view it as a profession exclusively for "posh people." However, they had limited knowledge about the medical school admissions process beyond the requirement for high academic achievement. This gap in understanding was partly due to the lack of social contacts who were doctors and the limited capacity of career advisors to support medical school applicants (43).

Students from non-traditional backgrounds at three medical schools in Scotland reported feeling uncertain about their aspirations to study medicine during the application phase. They engaged in social comparisons but found these insufficient to resolve their doubts about their suitability for medical school. Upon receiving their exam results, they viewed this objective data as an indication that they were indeed suitably qualified for medical school. However, the delay in receiving this reassurance often meant they did not begin preparing their applications early enough, which they felt put them at a disadvantage compared to their more affluent peers who were more confident in their abilities (44).

In Alexander et al.'s study of academically able non-traditional school students from three areas in the UK, participants did not perceive medicine as culturally unsuitable for them. Instead, they noted that medicine appeared to be becoming more inclusive and identified the high academic grade requirements as the most significant remaining barrier (36). This shift in perception compared to Greenhalgh's earlier study may be attributed to the significant widening participation activities implemented in recent years.

Too difficult to get in?

Potential applicants may be interested in medicine and see it as a suitable career, but perceive the admissions process as an insurmountable hurdle and not apply. In a study of attendees at a widening participation programme at one university in England, schoolchildren identified the main deterrents to applying to medical schools as concerns about not receiving offers and not meeting the high academic grade requirements (45). While participants perceived that medical students typically came from different backgrounds and feared they might not fit in, this was not a major deterrent. The authors concluded that a lack of information about medical school admissions was the primary cause of most of the deterrents described by participants. This information gap was attributed to limited access to medical professional contacts and successful medical student role models from their schools, compounded by inaccurate information provided by teachers. Additionally, there was a perception that applicants from private schools received more support with their applications (45).

Concerns about grade requirements are not unfounded. Applicants from non-traditional backgrounds are less likely to achieve the very high level of academic performance required (4). Students at fee-paying or independent schools perform significantly better in national exams at secondary education (general certificate of secondary education (GCSEs), A levels); for example, 50% of private school students taking A level chemistry achieve an A or A* grade, compared to 30% of state school students (46). Research has demonstrated that applicants to medical schools from fee paying schools do on average have higher academic attainment (47).

Apply unsuccessfully?

A final explanation is that applicants from lower socioeconomic backgrounds are less likely to succeed when they do apply to medical schools. Evidence shows that these applicants are less likely to receive offers that their more privileged counterparts (3). The odds of being accepted into medical school are 89% higher for private schooled applicants and 62% higher for grammar schooled applicants compared to those from state funded non-selective schools (48). Some argue that these disparities are due to differences in prior academic attainment between socioeconomic groups (4). However, the gap in academic attainment between pupils from state schools and private schools does not fully explain the differential success rates amongst these groups. In a causal mediation analysis of applicants in 2004, matched by gender, ethnicity, socioeconomic classification, and geographical region, privately educated applicants were still more likely to be accepted into medical school. This difference

was independent of academic attainment, suggesting that other factors are at play (47).

A study of medical school application data from 2009-2012 demonstrated notable differences in the proportions of applicants from lower socioeconomic backgrounds applying to and being offered places at 22 different UK medical schools (Figure 1.1). Although the percentages at all schools are small, there is a fourfold difference in the proportion of NS-SEC 4 and 5 applicants between schools 1 and 22. Furthermore, some schools, such as school 17, have a reasonable percentage of applicants from lower socioeconomic backgrounds but this is not reflected in their offer rates. The differential rates of applications and acceptances from individuals from lower socioeconomic backgrounds at different medical schools suggests that choice of medical school may be an important factor in their success. However, this issue has received very limited attention from the perspective of widening participation.

In the next section I will provide an overview of interventions that have been implemented to work toward widening participation goals, I will then go on to review the existing literature on medical school choice.

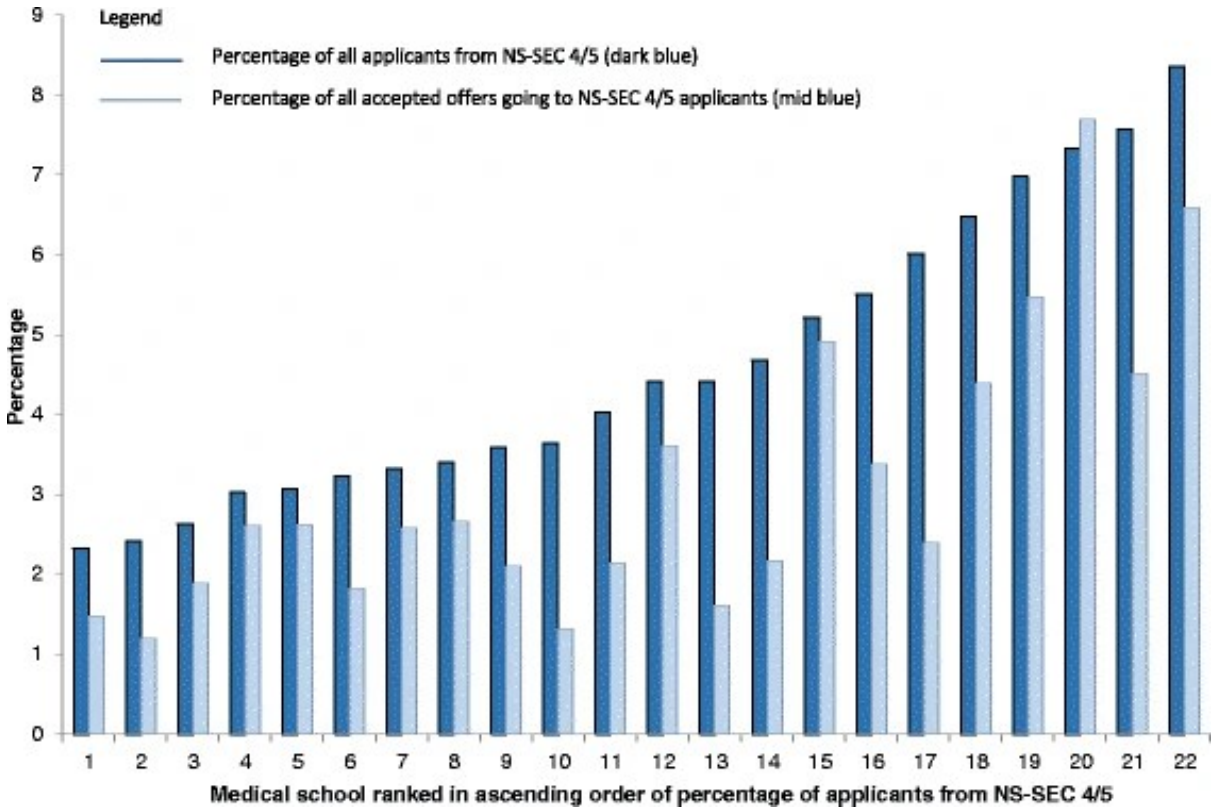

Figure 1.1. The percentage of NS-SEC 4/5 applicants and applicants with accepted offers at 22 UKCAT Consortium Medical Schools, 2009-2012 – from Linked UCAT and Universities and Colleges Admissions Systems (UCAS) data Steven et al. (2016) (3)

1.4 Interventions to widen participation to medicine

It has been national policy to widen participation to higher education in general and expand the sector since 1999 when the then-Prime Minister Tony Blair set an ambitious target for 50% of young adults to enter higher education within the next century (49). Plans to widen participation and expand the sector had two main components. Firstly, to widen participation through the recruitment of students who would otherwise not pursue higher education at all. Secondly, to ensure fair access to higher education by ensuring those from disadvantaged backgrounds have a fair chance of being admitted to more selective institutions and programmes (25). Given the high academic attainment required to study medicine, it is less likely that potential medical applicants would otherwise not pursue higher education at all. Interventions should therefore focus on encouraging those with the aptitude to consider medicine and to ensure they have fair chances of being admitted to what is a highly selective programme.

Policy interventions

Since 2016 there have been several policy interventions to increase the number of places available to study medicine. In 2016 the UK government announced an expansion in medical school places with funding for an additional 1500 students in England. These were allocated competitively to institutions with a strong track record for widening participation and to new medical schools that were prepared to commit to having at least a fifth of their intake selected from under-represented groups (50). More recently the NHS Long Term Workforce Plan has committed to doubling the number of medical school places by 2031(26). The plan also makes a firm commitment to widening participation in order to ensure the NHS workforce is representative of the communities it serves.

In addition to increasing the number of medical school places, the UK Government have established targets for UK Universities to achieve. In order to be permitted to charge increased tuition fees, the Higher Education Funding Council for England (HEFCE, now the Office for Students) required universities to meet targets in the percentage of students admitted from state schools or colleges, the percentage coming from SEC groups 4 to 7, and the percentage coming from low POLAR groups (25). For medicine, an ambitious doubling of the number of students from POLAR groups 1 and 2 from 14% to 28% was proposed (25).

In 2013, the Medical Schools Council's Selecting for Excellence project had a remit to widen participation to medicine and to promote excellence in selection (51). In its final report published in 2014 it made a series of recommendations for Medical Schools Council, medical schools, Health Education England (and equivalent bodies in the devolved administrations) the UK Government, and other stakeholders in order to achieve a ten year target of increasing the number of medical students admitted form POLAR quintiles 1 and 2 from 14% to 20% (17). One of the recommendations was the creation of a national Selection Alliance, which was formed in 2015 and represents the admissions leads of each UK medical school (52).

In order to achieve these widening participation aims, medical schools have put in place a number of interventions, with significant variation between medical schools (2). Paterson and Price classify these interventions into three phases: pre-application, application, and post-application (53). Each is described below.

Pre-application

Interventions in the pre-application phase are aimed at raising aspirations, providing information about selection procedures, and busting myths about admissions. This consists predominantly of outreach activities and widening participation schemes. These schemes vary throughout the country. Examples offered by medical schools include: the Plant a Seed series, which consists of a programme of three pre-recorded videos aimed at inspiring, educating, and motivating potential applicants to medical schools (54); student-led conferences for local year 12 pupils, including lecturers, workshops and the opportunity for participants to prepare and deliver a presentation on a topic of their choice (55); advice and guidance on writing personal statements, extracurricular activities, and submitting applications (56); and mock interviews (56). While most widening participation schemes are offered by medical schools, there are examples of offerings from NHS Trusts and individuals. A scheme run by Gloucestershire Hospitals NHS Foundation Trust consists of a virtual question and answer session with both junior and senior hospital doctors, an individual conversation with a patient facilitated by a junior doctor, and a two-day work experience placement (57). An individual junior doctor in South Devon has reported a programme they have delivered to four local colleges including outreach sessions, guidance on medical school choice, and mock interviews (58). Finally, there are also summer schools offered by national organisations. The Medical Schools Council, funded by NHS England, offers an annual summer school to over 500 students

including those in previously cold spots[1] (59). The Sutton Trust offers a two year longitudinal programme, *pathways to medicine*, for potential applicants in cold spots surrounding Yorkshire and Humber which includes skills sessions, e-mentoring, online work experience and a peer network (60). Finally, the Social Mobility Foundation runs the Aspiring Professional Programme which includes a medicine residential and face to face or online support for those in the worst quintile of local authorities identified by the Social Mobility Commission (61).

Application

Interventions in the application phase are aimed at ensuring applicants from underrepresented groups are not unfairly disadvantaged in the admissions process. Changes to the tools used for selection have attempted to mitigate against some of the disadvantage posed to non-traditional applicants. The most significant changes have been the introduction of the University Clinical Aptitude Test, Multiple Mini Interviews, and contextual admissions.

University Clinical Aptitude Test. The University Clinical Aptitude Test (UCAT, formerly UK Clinical Aptitude Test, further details provided in Chapter 2) was introduced in 2006 with a commitment to widening participation to under-represented groups (62). This admissions test attempted to overcome the disadvantage faced by those from lower socioeconomic backgrounds by testing aptitude rather than knowledge. While research findings suggest that those from higher socioeconomic backgrounds do perform better on the test (63, 64), using UCAT scores (as a factor or threshold) in shortlisting applicants has been demonstrated to be associated with a greater odds of applicants from lower socioeconomic backgrounds being successful in obtaining an offer (65). While both academic attainment at A levels and UCAT score are associated with school type and socioeconomic background, the effect appears to be weaker for the latter (66).

Multiple Mini Interviews. Multiple Mini Interviews have been adopted as a replacement for traditional panel interviews at the majority of UK medical schools. While the primary reason for this has been the potential for increased reliability and validity (13), there is also some data to suggest that they reduce bias against applicants from lower socioeconomic backgrounds (67).

Contextual admissions. Recognising the significance of the social contexts (e.g. school type) in which applicants achieve their grades, almost all medical schools now

[1] Areas that have been identified as not well served by individual medical school widening participation and outreach activities.

use contextual data to inform admissions decisions. Contextual admissions refers to the use of data on an applicant's background to influence admissions decisions, for example to confer eligibility for specific medical degree programmes (e.g. gateway courses, see below), to lower the threshold for invitation to interviews (e.g. reduced UCAT requirement or guaranteed interview), and/or to offer a reduced grade offer to successful applicants (15). Data used can be at the level of the individual (e.g. household income, eligibility for free school meals), school (e.g. school type, average educational attainment), and/or area (e.g. POLAR, IMD). Different medical schools use different data and use them in different ways (15).

Part of the justification for the use of contextual admissions to offer reduced grade offers is predicated on a study which found that medical students who achieved BBB grades at A-level at secondary schools with lower average attainment outperformed those who achieved AAA grades at secondary schools with higher average attainment when it came to in course assessments (68).

Post-application

While admission to medicine remains a significant hurdle, it is also essential that those who are admitted are supported to be successful during their transition to, and throughout, the medical programme. A recent qualitative systematic review explored the experiences of widening participation students in UK medical schools (69). They found that some students did not feel like they fit in and tended to socialise in groups with others of their background. In some instances, this had consequences on their access to learning opportunities. It is important to note this study included research on different ethnicities, mature students, students with disabilities, and students from different socioeconomic backgrounds. A recent survey study identified that UK medical students from a widening participation background reported they were less likely to have financial support from their parents, were more likely to feel limited by their financial situation, were more likely to have a job that was impacting on their studies than their peers(70) and were more likely to feel that their background impacted on their mental health (70). The results of this study should be interpreted with caution as it used convenience sampling through the social media channels of a national widening participation organisation and had a small response rate.

In order to overcome some of these challenges some medical schools have introduced gateway courses (25) (further detail on differences in medical programme types is provided in Chapter 2). These are medical degree programmes with an additional year (making them six years in total). Applicants must meet certain

eligibility criteria in order to apply (as discussed under *contextual admissions* above). The programmes are designed to bridge the attainment gap, provide enhanced mentoring and support, and foster a safe community of students from similar backgrounds (71, 72).

While graduates from gateway programmes do appear to have lower academic achievement at the end of medical school compared to graduates on standard entry programmes at the same institution, the effect size was small when adjusted for academic attainment and aptitude test scores on entry (73). In their postgraduate careers, graduates from gateway programmes were less likely to pass Royal College membership exams than graduates form standard entry courses (74, 75). However, there was no effect on their progression through training as measured by their Annual Review of Competence Progression (ARCP)) outcomes (74).

Compound interventions

These individual approaches are not used in isolation. For example, in 2001, King's College London were provided an increased allocation of medical school places which they decided to ringfence for applicants from state schools in local boroughs (policy). They developed an 'access to medicine' project with two key strands: firstly, a programme of enrichment activities for local state schools and colleges (outreach); secondly, an extended medical degree programme (post-application) for state-schooled students living in local boroughs with the aspiration and potential to train as doctors (application) (76).

1.5 Medical school choice

The process of applying to medical schools in the UK will be outlined in Chapter 2. Clearly, one of the key steps in this process will be choosing to which medical schools to apply. However, medical school choice has been the subject of limited enquiry. While research from the broader higher education literature can be illuminating, medical school choice is unique in several important ways. Firstly, only a minority of HEIs offer medicine as a course (see Chapter 2). Availability of preferred subject is naturally one of the fundamental criteria in HEI choice (77) and would be essential for prospective medical students.

Secondly, applications to medicine in general are extremely competitive with some medical schools being more competitive than others (see Chapter 2). Choosing to apply to a medical school does not guarantee that one will be successful in that application. There is a degree of risk inherent in the choice – they are undertaking a

(potentially calculated) gamble. Indeed, unlike other subject courses where an applicant might reasonably expect to be successful in at least one of their applications, it is not uncommon for applicants to be unsuccessful at all four medical school applications. Choosing wisely and aiming to maximise the likelihood of receiving at least one offer therefore is paramount to success in pursuing a career in medicine.

The majority of research on medical school choice has been conducted at single institutions on their applicants of recent entrants. However, as Hemsley-Brown and Oplatka caution, findings of studies of students at single institutions are to be interpreted with extreme caution as they are more likely to signify the views of students at that institution than the choice of the wider population (7).

Baron (1996) asked candidates at interview, those joining his clinical team, and those applying for jobs within his clinical team, why they had chosen St Mary's Hospital (London) Medical School (78). From the 645 responses he determined that perceived friendliness was the most important factor and was becoming increasingly important. Advise from relatives, teachers, or family doctors was the second most important factor, but was becoming decreasingly important. Other factors cited included: perceived quality of teaching and research, low grade offers, sport, prospectus, music, location, and miscellaneous.

Scholars at University of Liverpool conducted a study of their entrants over six years. They surveyed entrants regarding 13 attributes that they felt were strengths of the university to determine which were the most important considerations. The four most important considerations were the city in which the medical school was based (Liverpool), the integrated, problem-based course, liking the interview procedure, and reputation about the social life amongst medical students at that institution (79).

Brown (2007) conducted a qualitative interview study of 24 applicants to UK medical schools seeking to explore the attributes that applicants found attractive and the processes they used to make their choice decisions. She identified three categories of attributes that applicants described attracting them to specific medical schools: academics, location, and 'intangibles' (Figure 1.2) (8).

Academics	Location	Intangibles
• Getting in • Reputation • Teaching quality • Type of course structure/curriculum • Job prospects	• Preferences for specific towns/cities • Distance from home	• 'Feel' for the medical school • Personal compatibility • Personal contact/ recommendation

Figure 1.2. Attributes influencing medical school choice - adapted from Brown (2007) (8)

Within her study, applicants described considering applying to an average of six schools. They then used a range of resources (prospectuses, internet, league tables, visits, and guides) to gather information regarding these different options and evaluate them against the attributes they desired. However, the majority of participants described 'gut feeling' as being more important than comparing advantages to disadvantages. Two thirds of participants described using the same criteria to select all four choices (i.e. had homogenous choice sets) while the other third described different reasons for each of their choices (8).

Cleland *et al.* (2012) conducted a multi-institution study surveying first year medical students at the five Scottish medical schools. The main reasons students cited for choosing to study at their medical school were the location, reputation, preference for a particular city, curriculum, and facilities (80). Compared to those born outside the UK, students born in Scotland were more concerned with location and less concerned with reputation and the curriculum. The city was considerably more important to younger students (<21) than older students (≥21) and to those born in England, Northern Ireland or Wales compared to Scotland. Course curriculum was more important to females than males. No significant differences in reasons for wanting to apply to specific medical schools were seen amongst students from different socioeconomic backgrounds.

McManus *et al.* (1993) overcame the limitation of sampling recent entrants by surveying applicants to five UK medical schools in the 1990-91 admissions cycle (81). They enquired regarding applicants' five medical school choices (five choices were permitted at this time) and which of 22 features attracted them to these schools. They conducted principal component factor analysis on the 5427 responses to identify four factors from the 22 attributes: reputation, personal contact, location, and prospectus.

While the majority of medical school choice research has taken place in the UK, a handful of studies have taken place internationally. Namely in the USA, the Netherlands, and Australia. In the USA, where applicants can apply to as many medical schools as they wish, data from the Association of American Medical Colleges' matriculating student questionnaire identified that the top 10 (out of 29) factors that students weighed when choosing their medical schools were: general reputation of the school, interviews/meetings with students, interviews/meetings with faculty, teaching methods and/or curricula, geographic location, ability of school to place residents, interviews/meetings with administrators, community-based medicine, faculty mentorship, and opportunity for research experience (82). This study also found that the majority of recent entrants from ethnic backgrounds traditionally underrepresented at US medical schools valued programmes targets at minority students and considered these positive of very positive factors influencing their medical school choices. Fewer white students reported the availability of diversity programmes as being as important than any other ethnicity (82).

In the Netherlands, there were historically multiple entry route to medical schools (83). Applicants with the highest pre-university academic attainment were admitted to the medical school of their choice. Those with lower academic attainment could apply through a weighted lottery and indicate their top three medical school choices. Applicants may also have applied to one medical school through a selection procedure. Wouters *et al.* surveyed students at three Dutch medical schools who had applied to a medical school using a selection procedure (even if they were ultimately admitted through a lottery) (83). They found that the majority of students indicated that the selection procedure employed by different medical schools was the main reason for their choice. This was followed by the city in which the university was located, the course curriculum, and then the perceived university culture. Students who were first in family to attend university were less likely to have chosen based on the curriculum than those whose parent(s) had attended university. Females were more likely to have chosen based on the city in which the university is based than males.

In Australia, researchers investigated which factors students consider when deciding to attend rural clinical schools. They found that perceived better access to patients, academic reputation, and subsidised accommodation where the three most positive factors in deciding whether to attend a rural clinical school (84). It should be noted, however, that these students were already enrolled in a medical school and were deciding where to do their clinical training. Many of the factors considered in medical

school choice in other studies would therefore not be applicable. Equally, the findings from this research are less relevant to medical school choice in the UK. These findings may be more relevant to choice of postgraduate clinical training location in the UK, a review of which is outwith the scope of this chapter.

Finally, a qualitative interview study of recent entrants to one Canadian university that had three distinct sites that applicants could preference: a city, an Ireland, and a remote place, identified three main considerations: the education they would receive at each site, differences in relationships at different sites, and impact on lifestyle (85). All of these appeared to be influenced by size; both the size of the cohort in each site and the size of the population living there. The needs of partner's or family were prioritised over other factors.

These studies give us interesting insights into some of the attributes that applicants find attractive when evaluating different medical schools. However, they do not discuss differences between applicants of different socioeconomic groups, how applicants go about making the choice decisions, and what factors influence these decisions.

Conclusion

In this chapter, I have highlighted the persistent inequities in medical school applications and offers for students from lower socioeconomic backgrounds. I have explored the underlying reasons for this underrepresentation and identified medical school choice as a potential contributing factor. Given the limited existing research on medical school choice, this gap underscores the need for further investigation. In the next chapter, I will provide an overview of the medical school admissions process and the key differences between UK medical schools to establish the necessary context for my research.

Chapter 2. Medical school admissions in the UK

As highlighted in Chapter 1, the process by which applicants choose medical schools has been poorly understood. To comprehend these choices, it is first essential to examine the many significant ways in which medical schools and their courses differ. This chapter provides an overview of medical school admissions in the UK, establishing the context for the research presented in this thesis. It will explore where applicants apply from, the UK medical schools they can choose, the methods of application, the selection procedures used by medical schools, and the timelines of these processes. Understanding the breadth of options available and the timing of key decisions is critical to appreciating the factors that influence these choices.

In the UK, all applications to undergraduate university courses are submitted through the national application system known as the Universities and Colleges Admissions Service (UCAS). Applicants can select up to five course choices, with a maximum of four allocated to medical or dental courses. While the general application deadline is in January each year, applications for medicine, dentistry, and courses at the universities of Oxford or Cambridge must be submitted earlier, by mid-October of the preceding year.

2.1 The journey to medical school

The journey to entering medical school is lengthy and complex, beginning well before the application is submitted. To have a reasonable chance of success, applicants must undertake significant preparatory work. Figure 2.1 illustrates the timeline of this journey for applicants applying to medical school. The timeline, and the following discussion, uses the General Certificate of Secondary Education (GCSEs) and A-Levels to illustrate for applicants domiciled in England or Wales. For Scottish domiciled applicants, this process involves sitting Highers and Advanced Highers instead of these qualifications.

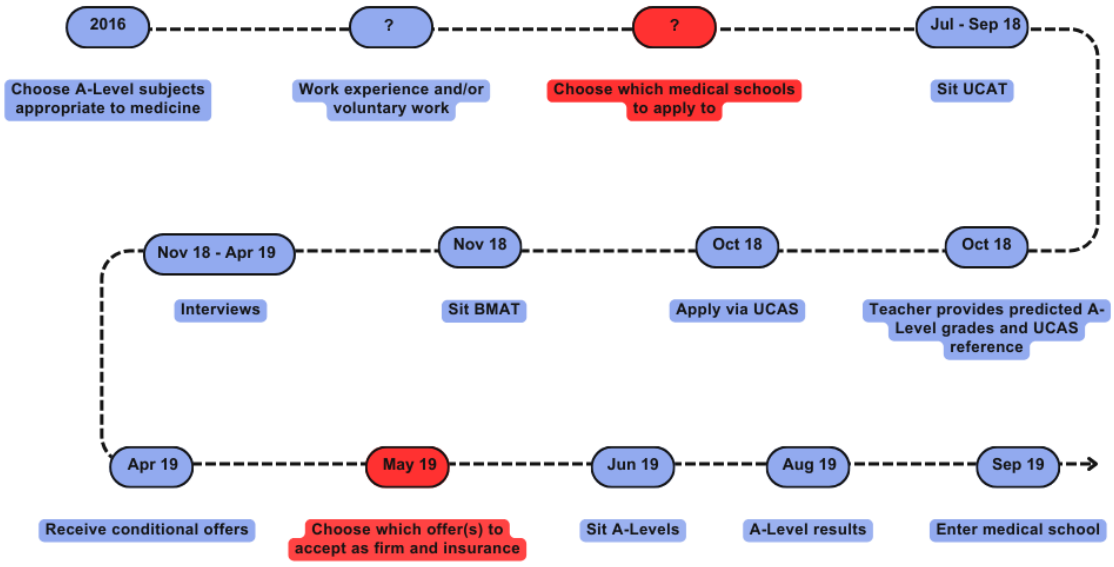

Figure 2.1. An illustrative journey of the stages between choosing A-Level subjects and entering medical school for a successful school leaver applicant in England and Wales for 2019 entry.

The steps are presented as a sequence, but it is important to note that the application process is rarely linear. Multiple steps may occur in parallel or be revisited at different stages. For instance, choosing a medical school is depicted as an early step. While applicants are likely to begin considering their options at this point, they may revisit their choices as they progress through the process and gain new information—such as attending open days, receiving predicted grades, or obtaining UCAT scores. Similarly, activities such as work experience and voluntary work, which are shown early in the timeline, may span the entire journey, particularly for those engaging in longitudinal experiences like sustained voluntary commitments.

As shown, many steps occur between deciding to apply for medicine and submitting the application form. The diagram does not include the initial decision to pursue a medical career, which can happen at any time before the October application deadline. Many applicants, however, decide they want to study medicine well before choosing their GCSE subjects (at around age 14) (39). Others may achieve strong GCSE results and subsequently decide—or be encouraged—to consider a career in medicine.

By the time applicants select their A-level subjects, most are likely seriously contemplating their medical school applications. Many medical schools require specific A-level subject combinations, particularly Chemistry, Biology, or both. Thus, students aiming to apply for a standard entry medical course as school leavers would be well-advised to study both Chemistry and Biology at A-level to meet the eligibility criteria for all medical schools. Consequently, applicants would either need to have decided on a medical career before choosing their A-level subjects or already be studying science A-levels for other reasons.

2.2 Work experience and/or voluntary work

Applicants are encouraged to undertake work experience to develop the values, attitudes, and behaviours necessary for a career in medicine. This also provides an opportunity to gain insight into the profession and to demonstrate experience in delivering care or service in a people-facing role. There are two broad categories of work experience that applicants are advised to consider:

1. Working with people in a caring or service role (this does not necessarily need to be in a healthcare context).
2. Direct observation of healthcare (shadowing).

The Medical Schools Council strongly emphasises the first type, highlighting that such experience can be gained through either paid or voluntary work (86). They also stress that many of the attributes medical schools seek in applicants can be developed and evidenced through paid roles in areas like catering or customer service.

2.3 Choosing medical schools

Course types

At the time of writing, there are 46 medical schools in the UK, many offering more than one medical degree programme. These courses can be categorised into four broad types (Table 2.1), all of which result in the award of a Primary Medical Qualification (PMQ), and entitle graduates to provisional registration with the General Medical Council. Of these medical schools, 44 of the 46 offer standard entry medicine courses. Courses with preliminary or gateway years typically have smaller cohorts. Graduate entry programmes make up the minority of programmes and typically have smaller cohort sizes than standard entry. Therefore standard entry courses account for the vast majority of all medical school places in the UK.

Table 2.1. Overview of medical degree course types in the UK (87)

Course type	Description
Standard entry medicine	Usually a five-year course. Some universities have an optional or compulsory extra year for an additional 'intercalated' degree.
Graduate entry medicine	An accelerated four-year course for applicants with a previous bachelor's degree.
Medicine with a preliminary year	Six-year course comprising of standard five-year course with an additional year at the start. Designed for applicants with high academic attainment but in non-science subjects. Additional year aims to provide necessary scientific knowledge as foundation for medical course.
Medicine with a gateway year	Six-year course aimed at applicants who may have experienced barriers to learning because of the context. The additional year is a foundation year. Applicants need to meet specified contextual criteria.

Applicants to medicine in the UK can come from a variety of backgrounds and can be categorised into four broad groups:

1. School leaver, first-time applicant.
2. School leaver, reapplicant.
3. Graduate applicant.
4. Mature applicant.

Each of these categories can be further divided into UK-domiciled or international applicants. For the 2022 entry, there were 29,710 applicants to medical courses, of whom 5,710 were reapplicants (88). The majority (72.5%) of these applicants were school leavers (i.e., under 21 and without a prior undergraduate degree) (88). It is worth noting that graduate and mature applicants may have previously applied to medical school as a school leaver and been unsuccessful (either in receiving one or more offers or meeting the conditions of their offer(s)). In this chapter, I will primarily focus on the admissions journey for UK-domiciled, first-time school leaver applicants, as they represent the largest group of applicants to UK medical schools and are the main population of interest in this thesis.

2.4 Differences in medical schools

There are many differences among the 46 medical schools in the UK, which can significantly influence how prospective applicants perceive them. When considering choice, it is important to highlight the most significant features that distinguish one institution from another. Three primary areas in which medical schools vary are prestige, geographical location, and course curricula. An overview of each is presented below.

Prestige

The Oxford English Dictionary defined prestige as "Influence or reputation derived from achievements, associations, or character." (89). Prestige can be conceptualised in many ways. There are several objective indicators of prestige, including university rankings, membership of the Russell Group, and the age of the medical school. Each is discussed below, followed by a consideration of subjective conceptualisations that potential applicants may make.

University rankings. Various league tables rank universities in the UK, such as *The Guardian*, *The Times*, and the *World University Rankings*. Subject-specific rankings for medicine provide an ordinal measure of medical school prestige. Although graduate employment rates for medical graduates are high across all UK medical schools—given that most go directly into the Foundation Programme (a two-year training programme consisting of six 4-month rotations through different specialities within the NHS) after graduation—small fluctuations in other metrics (many derived from the National Student Survey) can cause significant shifts in rank order from year to year. Nevertheless, applicants may only consult these league tables only in the year they are making their choices of medical schools.

Russell Group membership. The Russell Group consists of 24 of the UK's most research-intensive universities (90). Membership in this group is often associated with prestige. All but two of these universities currently have medical schools (Durham University had a medical school between 2001 and 2017, and the London School of Economics and Political Science has never had one).

Age of the medical school. Older, more established medical schools may be considered more prestigious, having had more time to develop reputations and produce notable alumni. The age of UK medical schools can broadly be divided into four groups:

1. **Pre-20th Century establishments:**
   Some universities delivered medical training long before their medical school existed in its current form. For example, the University of Oxford has offered medical education since the twelfth century, although its clinical school was officially established in 1936.

2. **1970s establishments:**
   A wave of medical schools was founded in response to the Todd Report (91).

3. **Early 2000s establishments:**
   Another wave of medical schools opened in the early 2000s (92).

4. **Post-2015 establishments:**
   Thirteen new medical schools have been established since 2015, including three private, full-fee-paying institutions, nine publicly funded schools in England and one new medical school in Northern Ireland (which opened after the data in this thesis were collected). Additionally, several new medical schools plan to have their first cohorts in the coming years.

Table 2.2 provides an overview of the different objective markers of prestige for UK medical schools in 2018 (data for this thesis were collected in 2018 so these would be the markers available to participants in this study) including proportions of applicants offered places, whether the university was a member of the Russell Group, their ranking in the Guardian league table for medicine, and the year the medical school was established. Medical schools that have been established since 2018 are included.

Subjective conceptualisations of prestige. Beyond these objective measures, there are numerous subjective ways in which individuals conceptualise prestige. Medical school curricula vary significantly, and some applicants may perceive certain curricula as more prestigious than others.

Table 2.2. Different markers of prestige for UK medical schools.

Wave	Medical School	Number of applicants (2018)	Percentage of applicants offered places (2018)	Year established	Russell Group	Guardian 2018 ranking
Pre-20th Century	Barts	1785	30%	1123	✓	3
	Oxford	1015	15%	1312	✓	1
	St Andrews	660	46%	1413		17
	Aberdeen	1445	27%	1497		12
	King's	1515	49%	1561	✓	31
	Glasgow	1360	32%	1637	✓	8
	Edinburgh	1705	25%	1720	✓	10
	St George's	1085	37%	1752		30
	Birmingham	1900	45%	1825	✓	20
	Sheffield	1435	42%	1828	✓	25
	UCL	1560	31%	1828	✓	7
	Leeds	1565	21%	1831	✓	21
	Bristol	3070	16%	1833	✓	23
	Imperial	1350	40%	1834	✓	11
	Liverpool	1935	44%	1834	✓	29
	Newcastle	1720	33%	1834	✓	13
	Queen's	635	58%	1849	✓	27
	Manchester	2025	43%	1874	✓	26
	Cardiff	1610	39%	1893	✓	19
1970s	Nottingham	1790	32%	1966	✓	22
	Dundee	1155	26%	1967		4
	Southampton	1220	37%	1969	✓	24
	Cambridge	890	28%	1975	✓	2
	Leicester	1955	32%	1975		28
Early 2000s	Exeter	1270	25%	2000	✓	5
	Norwich	915	44%	2000		15
	Plymouth	630	41%	2000		14
	Warwick	§	§	2000	✓	32
	Brighton and Sussex	870	29%	2001		16
	Hull York	1105	47%	2001	*	18
	Keele	1140	22%	2004		6
	Swansea	§	§	2004		9
	Lancaster	445	31%	2006		†
Post-2015	Aston	125	39%	2015		†
	Buckingham	‡	‡	2015		†
	Central Lancashire	‡	‡	2015		†
	Anglia Ruskin	185	14%	2018		†
	Edge Hill	‡	‡	2019		†
	Sunderland	‡	‡	2019		†
	Kent and Medway	‡	‡	2020		†
	Brunel	‡	‡	2021		†
	Ulster	‡	‡	2021		†
	Three Counties	‡	‡	2023		†
	Chester	‡	‡	2024		†
	North Wales	‡	‡	2024		†
	Pears Cumbria	‡	‡	2025		†

*§ These schools to not have a standard entry medicine programme. ‡These schools did not have an entry cohort in 2018. * One member university of this partnership is a part of the Russell Group. † These institutions were not featured in the 2018 Guardian league tale for medicine*

Curricula

Until the 1990s, undergraduate medical curricula in the UK were largely homogenous. In response to the first edition of the GMC's *Tomorrow's Doctors* in 1993 (93), more innovative approaches began to emerge—most notably, the introduction of Problem-Based Learning (PBL). Defined as "the learning that results from the process of working toward the understanding or resolution of a problem," (94). PBL is a pedagogical method first developed at McMaster University in the 1970s. It uses a trigger "problem" to prompt students to review their existing knowledge and identify the learning objectives needed to better understand the scenario.

While all UK medical schools are quality assured by the GMC to ensure they meet *Outcomes for Graduates (95)*, individual curricula differ in their approaches to teaching and learning. A comprehensive review of these curricula lies beyond the scope of this chapter; readers seeking more detail may consult the AToMS study (96). Here, I provide a brief overview, paying particular attention to how curricula are presented to prospective applicants. The British Medical Association (BMA) categorises UK medical curricula into six approaches (Table 2.3) (97). Although this categorisation is somewhat simplistic, it reflects the way many websites aimed at potential medical students describe different curricula.

Table 2.3. Curricula approaches in UK medical schools, adapted from the BMA (27).

Curricula approach	Description
Traditional pre-clinical and clinical	Typically consist of two years of pre-clinical study of basic science (may be one year for graduate entry courses) followed by three years of clinical workplace-based learning. Lecturers are the predominant teaching method.
Integrated/ systems-based	Integrates content from different disciplines in to teaching on specified body systems. Clinical content is integrated into early years teaching. There may also be an emphasis on early clinical experience through placements in years one and two.
Problem based learning	Students work through cases in groups facilitated by a tutor to identify learning objectives to direct their own self-study.
Cased based learning	Uses trigger cases identified from real or virtual patients to stimulate learning around specified topics.
Enquiry based learning	Students direct self-study to address questions or scenarios. Similar to problem-based learning.
Multi or inter professional learning	Learning together with students of other healthcare professions.

Geography

Naturally the geographical areas of different medical schools vary. Many of the larger (and older) medical schools are located in big cities such as London, Manchester, Birmingham and Edinburgh. These cities have vibrant social scenes and cultural diversity with ample leisure activities. In contrast there are several medical schools based in coastal towns and cities or near national parks that provide opportunities for outdoor activities. Finally, there are also some medical schools in smaller cities and rural settings that are often campus based with a greater sense of campus identity.

2.5 Admissions procedures

All medical school applications in the UK are submitted through UCAS. Applicants provide a personal statement, details of their prior (and predicted[2]) academic achievements, admissions test results, and a personal reference. Once applications are submitted, they are reviewed by individual medical schools. Admissions procedures vary considerably between UK medical schools and have undergone substantial changes over the last 15 years. Most schools use a combination of prior academic performance, predicted grades, personal statements, references, and admissions test scores to shortlist candidates for interview. However, the specific methods and the weight given to each factor differ across institutions. Shortlisted applicants are typically invited to either a panel interview or a multiple mini-interview (MMI). More detail on each of these measures is provided below.

Academic achievement

For many years academic achievement has been the mainstay of selection to medical school. Performance on A-Levels (General Certificate of Education Advanced Level, a school leaver qualification normally sat at age 18) has been demonstrated to be highly predictive of performance at medical school (98, 99). McManus et al. have postulated three explanations for the predictive ability of A-level grades; cognitive ability, relevant substantive content, and motivation (100).

> *Cognitive ability.* Performance on A-Levels is a measure of cognitive ability. Those with high performance are likely to also perform well in (and beyond) medical school.
>
> *Relevant substantive content.* Content in science-based A-levels are a necessary prerequisite to understanding the foundations of health and disease.
>
> *Motivation.* Achieving high grades on A-Levels reflects applicants' motivation and personality. If past behaviour accurately predicts future behaviour, then this motivation will serve them well in medical school.

The use of academic achievement, is however, not without its problems. First, there is a significant ceiling effect with many applicants receiving the top grades. Before the introduction of an A* grade, 43% of applicants all achieved AAA (101). This provides challenges in discriminating between top performers when shortlisting for interview.

[2] School leaver applicants typically apply before they have their A-Level results, so they provide teacher-predicted grades.

Since the introduction of the A* A-level grade in 2010, medical schools have been able to better distinguish the most qualified applicants. There is however the question of whether this is the most important criterion, or whether 'sufficient' academic achievement should be attained, and then selection should be based on the assessment of other attributes.

This leads to the second problem; while A-levels may assess knowledge, cognitive ability, and motivation, clearly there are many other attributes that are desirable for future doctors. In one small study, when asked what kind of doctor they would like to see, patients appear to emphasise communication and interpersonal skills over knowledge and intelligence (102).

As can be seen in Figure 2.2, academic attainment is just one of 17 'core attributes' described by Medical Schools Council. Other measures are required to assess the remaining attributes to determine which applicants are most suited to a career in medicine. The measures currently in use to assess these qualities include interviews, personal statements, personal references, and admissions tests. Each is discussed in further detail later in this chapter.

While the emphasis given to academic achievement might have decreased over the last decade, the grade requirements have steadily increased. In 2006 18 medical schools required AAB, two required AAA and two required AAB (103). For 2022 entry, 31 courses required AAA, one required A*A*A, four required A*AA, two required AAB, and one required ABB.

The third problem with the use of academic achievement, is that performance varies by both social class and school type attended (104). The differences in academic attainment exist by age 11 and appear to be the main driver of differences in progression to higher education in the UK. However, medical students who studied at lower average performance secondary schools who enter medical school with BBB outperform those from the highest average performance secondary schools with AAA, when it comes to medical school exams (68). This calls in to question the validity of using uncontextualised academic attainment as a selection measure.

The fourth problem is one of timeline. First time school-leaver applicants don't sit their A-Level examinations until seven months after they submit their UCAS form, and don't receive their results until 10 months after. Schools and further education colleges therefore must predict the grades that their pupils will attain in order for medical schools to have recent measures of academic attainment at the time of application. Until recently there had been very little work in the field of predicted

grades. One study identified 52% of predicted grades were accurate, 41% were overpredicted, and 7% were underpredicted (105). Concerningly, these predicted grades were not predictive of in course preclinical performance. Due to the use of centre assessed grades owing to the inability of pupils to sit examinations during the COVID-19 pandemic, this has become the focus of renewed attention. A recent United Kingdom Medical Education Database (UKMED) study of applicants to all UK medical school between 2014 and 2018 demonstrated that less than half of predicted grades were accurate (106). A staggering 44.7% of predicted grades are overpredicted and only 6.5% are underpredicted. Whether applicants from lower socioeconomic backgrounds are disproportionately underpredicted grades has been the subject of some speculation. Conclusive answers are not yet available, but predicted grades from independent schools and state schools appear to have the same predictive validity (106).

Personal statement

As part of the UCAS application process, all applicants must submit a personal statement of up to 4,000 characters (107). The Medical Schools Council (MSC) has outlined a set of key skills and attributes considered essential for studying medicine (Figure 2.2). While individual medical schools may emphasise certain attributes more than others, depending on their specific values and mission, the personal statement provides an opportunity for applicants to demonstrate these qualities. Applicants are generally advised to structure their personal statements into four sections: an introduction, knowledge and interest in the subject, work or voluntary experience, and hobbies or interests. In doing so, they should illustrate how they meet some of the MSC's core values and attributes (108).

- Motivation to study medicine and genuine interest in the medical profession
- Insight into your own strengths and weaknesses
- The ability to reflect on your own work
- Personal organisation
- Academic ability
- Problem solving
- Dealing with uncertainty
- Manage risk and deal effectively with problems
- Ability to take responsibility for your own actions
- Conscientiousness
- Insight into your own health
- Effective communication, including reading, writing, listening and speaking
- Teamwork
- Ability to treat people with respect
- Resilience and the ability to deal with difficult situations
- Empathy and the ability to care for others
- Honesty

Figure 2.2. Core values and attributes needed to study medicine, adapted from MSC (2018) (108).

Prior to the introduction of admissions tests for medicine, personal statements (alongside academic achievement) were the mainstay for shortlisting for interview (109). In 2006, 20 out of 22 medical schools used personal statements either to shortlist for interview (n=18) or to inform offers without interview (n=2) (103). However, there were growing concerns regarding a number of their limitations (110).

Firstly, the assessment of personal statements was recognised to be inherently subjective which results in poor inter-rater reliability (i.e. a candidate would be likely to get different scores depending on which assessor rated their statement). One study did find reasonable inter-rater reliability (0.785) when a small pool of only four assessors undertook shortlisting based on personal statements (111). Naturally, this has implications on resourcing and feasibility.

Considering what assessors were looking for in personal statements, one study found that medical work experience was the most important factor in shortlisting candidate for interview. The lack of such work experience was the most frequently cited reason for rejecting applicants before interview (112).

Most students from wealthier backgrounds would attend residential courses where, amongst other things, they would receive coaching on their personal statements (113). Furthermore, analysis of personal statements demonstrated no association between either the quantity or topics discussed in applicants' personal statements with performance on pre-clinical in course assessments (114). Nor do the ratings assigned to personal statements predict pre-clinical performance (115). However, quantity of information within the personal statement did appear to be associated with better performance in the clinical phase of courses (116).

The sum of these concerns resulted in appetite for additional measures to help discriminate between the ever-increasing numbers of applicants with high academic achievement. This led to the introduction of admissions tests, discussed below. Consequently, while personal statements are required as part of the UCAS application, they are now rarely used to inform admissions decisions (62).

Personal reference

In addition to submitting a personal statement, applicants must provide a written reference from someone familiar with their academic background who can comment on their suitability for a career in medicine. School leavers are advised to request a reference from a teacher, principal, or head teacher, while mature applicants may ask employers or supervisors of voluntary work, and graduate entry applicants typically seek references from university faculty. These referees are encouraged to highlight the applicant's attributes and express whether they believe the individual is well-suited to a career in medicine.

However, similar to personal statements, references have been found to have no predictive validity for in-course assessment (116). As a result, although references remain a required component of the UCAS application, their role in admissions decisions has significantly diminished in recent years (62).

Admissions tests

There are currently two main admissions tests used for entry to UK medical schools: the University Clinical Aptitude Test (UCAT) and the Graduate Medical School Admissions Test (GAMSAT). At the time of data collection, the Biomedical Admissions Test (BMAT) was also in use, but has since been discontinued. Each medical school may use one or more of these tests in various ways.

University Clinical Aptitude Test (UCAT)

UCAT was established in 2006 and, until 2019, was known as the United Kingdom Clinical Aptitude Test (UKCAT) (117). The test is computer-based and comprises four cognitive subtests—Verbal Reasoning, Decision Making, Quantitative Reasoning, and Abstract Reasoning—as well as a Situational Judgement Test (SJT), introduced in 2013. Applicants are responsible for booking and completing the test themselves: booking opens in June, the testing window runs from July to September, and candidates receive their results immediately upon completion. Official results are then sent to universities in November, after the UCAS deadline. A registration fee (currently £70) applies, although eligible applicants (often those from low-income households) may apply for a bursary to have this fee waived.

Medical schools use UCAT scores in four main ways (62). Each institution employs the test differently, and some adopt multiple approaches simultaneously (for example, using the factor method for cognitive subtests and a threshold method for the SJT). When UCAT was first introduced, it was primarily used at the offer stage for borderline applicants. However, as evidence of the test's predictive validity has emerged (118), there has been a shift toward greater reliance on factor and threshold methods for shortlisting applicants for interview. Over time, the threshold scores required have generally increased. A recent systematic review found that while UCAT performance correlates with in-course assessment outcomes, its predictive power is weak (119). Furthermore, there is limited evidence that UCAT provides incremental validity above prior academic attainment as a selection measure (119).

- **Borderline method:** used to discriminate between applicants at a decision borderline (either for invitation for interview or for offer)
- **Factor Method:** used as a weighted criterion to rank applicants (most usually for invitation for interview, but occasionally for offer)
- **Threshold method:** used to exclude applicants who do not meet a threshold score (for invitation for interview). Two approaches to determining the threshold are used:
    - *Actual thresholds.* Pre-determined, and usually publicly available for applicants (criterion referencing).
    - *Convenience thresholds.* A threshold is decided based on the number of applicants required to invite to interview (norm referencing).
- **Rescue method:** used to enable applicants with a high UCAT score to 'compensate' for a low score on another admission measure (for invitation to interview).

Figure 2.3. Approaches to use of UCAT scores. Adapted from Greatrix & Dowell (62).

BioMedical Admissions Test (BMAT)

BMAT was established in 2003 by the Cambridge Assessment Group (part of the University of Cambridge) and was used to select candidates for medicine, veterinary medicine, dentistry, and biomedical sciences courses (120). Historically, BMAT was exclusively employed by four of the UK's most prestigious medical schools—the University of Cambridge, the University of Oxford, University College London, and Imperial College London (120). Three additional medical schools then since incorporated BMAT into their routine undergraduate admissions, while two other UK universities required BMAT only from international applicants.

BMAT comprised three sections: Thinking Skills (problem-solving and critical thinking), Scientific Knowledge and Applications, and a Writing Task. It was taken in November, with results released later that month. Notably, both the test sitting, and the release of results occurred after the UCAS deadline for medicine applications, meaning candidates applying to BMAT-requiring schools must have done so without knowing their scores in advance.

Research on BMAT has shown that Section 2, which tests scientific knowledge, had some predictive validity (121). Because Section 2 assesses subject knowledge (rather than cognitive ability), performance on this section may have been prone to similar biases found in traditional academic exams (121). Indeed, studies indicate that

males, applicants from independent and grammar schools (compared to state-funded, non-selective schools), and those from schools more experienced with BMAT tended to achieve higher scores on Sections 1 and 2 (120). In 2023 it was announced that Cambridge Assessment, who ran the BMAT, were withdrawing from the admission test market and BMAT was discontinued.

Graduate Medical School Admissions Test (GAMSAT)

The Graduate Medical Schools Admissions Test (GAMSAT) was first developed in 1995 and is administered by the Australian Council for Educational Research (122). It has three sections:

1. Reasoning in Humanities and Social Sciences
2. Written Communication
3. Reasoning in Biological and Physical Sciences

Section 3 is typically weighted double, contributing half of the total assessment score (123). Although GAMSAT is primarily used for admissions to Australian medical schools, several UK medical schools also use it for selecting candidates to graduate-entry programmes.

Studies on the utility of GAMSAT have been conducted mainly in Australia. The exam demonstrates good internal consistency and discriminant validity among its sections (123). While performance on GAMSAT is weakly predictive of in-course achievement (124), it does not appear to predict workplace performance after qualification (125). The acceptability of GAMSAT is also debated. In a survey of 447 GAMSAT takers, respondents only moderately agreed that it was a fair selection tool (mean Likert response: 3.16 out of 5) (122). Concerns about fairness were primarily linked to the high costs of both preparing for and taking the exam. Over one-third of participants spent more than AUD$500 on test preparation, and almost half spent over AUD$500 to sit the test (including travel expenses) (122).

Interviews

Almost every medical school in the UK incorporates interviews into their admissions process, with only one exception. Generally, institutions employ one of two interview formats: panel interviews or multiple-mini interviews (MMIs).

Panel interviews

Panel interviews (sometimes referred to as traditional interviews) are a format traditionally used by many medical schools to assess applicants' interpersonal skills,

motivations, and overall fit for a career in medicine (126). In panel interviews, a group of interviewers typically comprising medical school faculty, practicing clinicians, and sometimes current medical students and members of the public asks questions and evaluates applicants' responses. Panel interviews may be structured or unstructured and usually cover topics such as an applicant's motivation for pursuing medicine, understanding of current healthcare issues, ethical decision-making, and relevant personal experiences. Candidates are expected to communicate clearly, think critically under pressure, and demonstrate qualities like empathy and resilience.

While panel interviews had face validity and acceptability, a growing body of evidence indicated that they were neither reliable (127) nor predictive of performance within medical programmes (128, 129). Concerns also arose regarding their susceptibility to coaching and the potential for one dominant interviewer's perspective to overshadow others, thus skewing the overall rating. As a result, Patterson et al. concluded that panel interviews are "not a robust method of selecting medical students." (5)

Multiple-mini interviews

Developed by academics at McMaster University in 2002, the multiple mini-interview (MMI) was designed to address the poor reliability and context specificity associated with panel interviews (12, 130). Based on the Objective Structured Clinical Examination (OSCE) approach to assessment, MMIs consist of a series of short, structured stations, typically each assessed by one or two raters. These stations are designed to evaluate distinct attributes and may involve questions, role-play scenarios, or group activities.

MMIs have demonstrated good reliability, face validity, and acceptability, with reasonable evidence supporting their predictive validity (13). Consequently, UK medical schools have widely adopted MMIs for selection, with 32 of 39 standard entry courses (83%) now employing this interview format.

2.6 Application ratios

There are significant variations in the ratio of applicants to available places at different medical schools, leading to varying offer rates across institutions. This is further complicated by the fact that some applicants receive multiple offers, allowing them to designate one as their firm choice and another as an insurance choice. If they meet the conditions of their firm choice, they are admitted to that programme; if not, but their insurance choice has lower requirements, they may still secure a place

there. Anticipating these dynamics, medical schools typically make more offers than there are places, knowing that not all offers will be accepted or fulfilled. Figure 2.4 shows the number of UK domiciled applicants and the percentage that received offers for standard entry medicine programmes in 2018. As you can see, the offer ratios vary drastically between different institutions, between 14% and 58%.

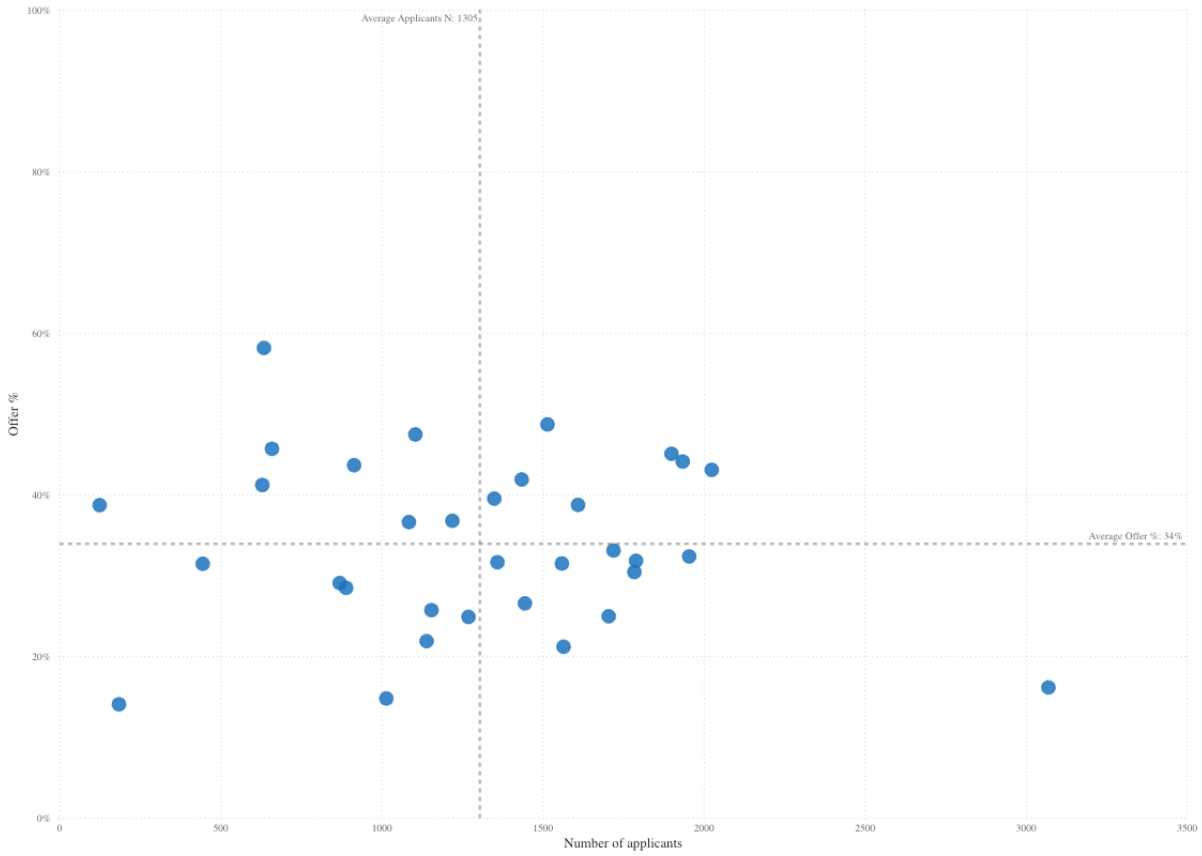

Figure 2.4. Applications and offers for UK domiciled applications to standard entry medicine courses in 2018 (131)

Conclusion

This chapter has provided an overview of the differences among medical schools and the steps an applicant navigates from deciding to pursue medicine to ultimately being admitted. The process is complex, involving multiple hurdles that candidates must clear to succeed. It is also non-linear, with applicants often revisiting and revising their choices as they learn more about specific institutions or receive exam results (such as GCSEs, A-Levels, or admissions tests). Selection to medical school is not unilateral: applicants choose which schools to apply to, and medical schools, in turn, select the applicants they wish to admit. Moreover, this entire process begins much earlier for prospective medical students than for other undergraduate degrees, requiring both applicants and their teachers to be well-prepared in advance.

Chapter 3. Understanding choice in medical education

To understand how applicants decide which medical schools to apply to, it is first necessary to explore how humans make choices more generally. Historically, the study of choice was the domain of economists, and over the past two centuries, theories of choice have evolved significantly. Other disciplines have built on these foundations: psychologists examine the mental processes involved in decision-making, marketing and consumer behaviour scholars investigate how people choose products and services, and sociologists explore the social factors that shape individuals' available options.

This chapter provides an overview of various theories of choice that can help us understand how applicants approach selecting medical schools and will serve as a conceptual framework for this thesis (132). I will begin by tracing the evolution of economic theories of choice, then discuss how these theories have informed thinking in other fields, before finishing with theoretical models of higher education choice. Throughout the chapter I will consider how each theoretical perspective may apply to medical school choice. Figure 3.1 provides a timeline of key theories of choice that will be discussed.

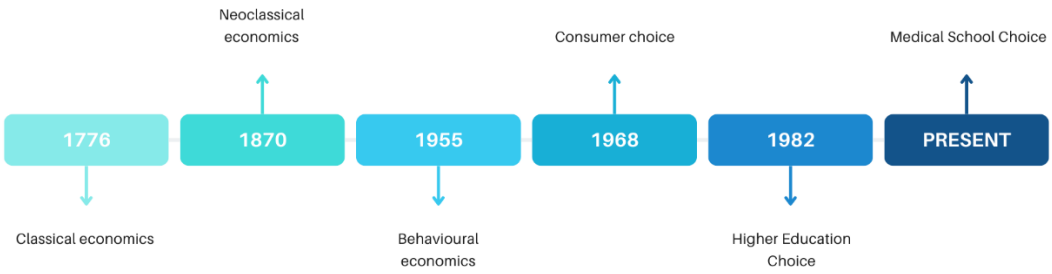

Figure 3.1. A timeline of theories of choice

3.1 Economics

Classical economics

The foundations of economic choice theories can be traced to Adam Smith's 1776 publication, *The Wealth of Nations* (133). In this seminal work, Smith argued that individuals make choices primarily for personal gain, yet such self-interested

behaviour can yield socially beneficial outcomes. His ideas laid the groundwork for viewing choice as a rational, self-interested process. Shortly after, Jeremy Bentham introduced the notion that individuals weigh costs and benefits in their decisions, providing a key precursor to utility theory (134). Building on Bentham's insights, John Stuart Mill proposed that people seek the greatest utility and happiness, a perspective articulated in his *Principles of Political Economy* (1848), which underpins classical economic views on choice (135). In classical economics there was the belief that a good's value was predominantly determined by how much labour (or other resources) went in to producing it.

Neoclassical economics

In the late 19th century, economics underwent the marginalist revolution, during which the concept of marginal utility was introduced. Rather than viewing value as determined solely by labour inputs or production costs, marginalist economists argued that value depends on the additional satisfaction a consumer gains from a good or service. This shift led to the idea of optimisation (maximising utility) and fostered a greater emphasis on individual choice behaviour.

Neoclassical economists believed that humans make *rational*[3] choices, encompassed in the notion of *homo economicus* (the 'economic man'). This theoretical construct described individuals who strive to maximise their utility (satisfaction), are motivated solely by their own self-interest, and are able to make completely rational choices in pursuit of these goals(136). From this perspective emerged rational choice theory, which holds that self-interested individuals evaluate the costs and benefits of various options before selecting the one they believe will yield the highest utility (137). This, however, relies on a number of assumptions (Figure 3.2).

[3] In economics this refers to making decision making based on making choices that will result in maximal utility, in contrast to its use in common parlance which would be decisions that are characterised by reasoning rather than emotion.

i. We aim for utility maximisation – we seek to make choices that will give us the most satisfaction.

ii. We have complete preferences – we can compare all options and rank them in order of how much satisfaction they would provide.

iii. We have stable preferences – our rankings would not change unless there were material changes in the options available.

iv. We have reflexive preferences – when given identical options we would be indifferent between them.

v. We have transitive preferences – if we prefer option A to B, and B to C, then we must prefer A to C.

vi. Ownership is not important – if we already own one option this would not affect our valuation of it.

vii. We make decisions in isolation – we make choices on our own preferences without influence from others.

Figure 3.2. Assumptions of rationalist economic theories of choice (adapted from Mallard (138))

Rational choice theory serves as the foundation for several models of decision-making behaviour. One of the most prominent of which is expected utility theory (EUT). EUT was first described by von Neumann and Morgenstern in their 1944 seminal text *Theory of Games and Economic Theory* (139). EUT theorises how we make choices when we are faced with risk and uncertainty. EUT asserts that when making choices we seek to maximise our expected utility. However, within the theory it is recognised that utility is subjective, and we are not necessarily able to quantify the utility we would receive from different outcomes. Nevertheless, we should at least be able to rank our preferences in an ordinal fashion. In EUT the outcomes of choices are not certain, and consideration also needs to be given to the likelihood of an outcome occurring (139). Rational choice theories therefore allow for mathematical modelling of choice behaviours where the expected utility of a choice is calculated by summing the utility of each possible outcome by the probability of that outcome occurring, expressed as:

$$Expected\ Utility\ (EU) = \sum [Utility\ (outcome\ i) \times\ Probability\ (outcome\ i)]$$

EUT provides interesting insights into our attitudes towards risk. This could be potentially useful for understanding how applicants make choices regarding medical

school application. For instance, would an aspiring medical student rather apply to their ‘dream’ medical school which they might be less likely to receive an offer from, or would they apply to another medical school which does not have all the attributes they would like, but which they may have a better chance of getting into? To even begin to make this choice, applicants would need to be able to estimate the utility they would receive from attending each medical school, and they would need to be able to estimate the probability of their application to each being successful. The former may be easier than the latter, which due to the multiple considerations discussed in Chapter 2, is likely to provide a challenge.

While many of the assumptions of rational choice theory may at first seem applicable to medical school choice, empirical research on choice behaviour has led them to be called in to question. This has given rise to the field of behavioural economics.

3.2 Behavioural economics

Behavioural economics draws on both the fields of economics and psychology (140). Whereas neoclassical economists developed theories of choice and then used these to formulate mathematical models to understand and predict choices, behavioural economists adopt empirical methodologies typical of psychology to investigate how individuals actually make choices.

Behavioural economic theories of choice are developed through observation of actual human behaviour. This can be achieved through two approaches: i) observational study, in which real world data is collected and analysed to try to make sense of choices ii) experimentation, whereby the researcher designs an experiment to see how participants respond and the choices they make. These approaches can be used in sequence to develop and iteratively refine theories of choice (Figure 3.3).

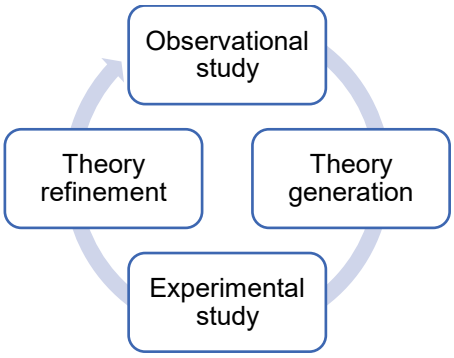

Figure 3.3 Methodology of behavioural economics, adapted from Mallard (138)

Findings from such empirical studies have refuted many of the assumptions inherent in rational choice theories. There remains debate regarding who established the field

of behavioural economics (141), but the American economist Herbert Simon was amongst the first to apply psychological ideas to economic problems. In work that would go on to both win him the 1978 Nobel Prize in Economic Science (142) and ostracise him from the economics community (143), Simon argued that humans were not able to make the perfectly rational choices described in traditional economic models. He argued that humans do not have access to all the information to be able to make complete choices, and nor do they have the cognitive abilities to process data on the scale required (144). Choices are constrained by these limitations and can therefore only have "limited rationality" (144). Simon later described this as *bounded rationality* (145), which has emerged as a subfield of behavioural economics.

Simon posited that in the context of complex decision making, rather than striving for *optimal* outcomes (those that would maximise utility), humans sought satisfactory outcomes. Satisfactory outcomes are those that meet a predetermined aspiration level or are 'good enough', rather than being the optimal choice that could, in theory, be achieved through an exhaustive search. This approach to making choices is termed 'satisficing', whereby people make decisions by setting a threshold of acceptability and choosing the first option that meets or exceeds that threshold. Satisficing is thought to reduce the cognitive effort and time people spend on decision-making.

For example, consider you are on an international city break with your partner and are looking for a restaurant for dinner. In order to find the optimal restaurant, you would have to consider all potential options and assess them against some criteria (i.e. proximity, cost, hygiene, quality of food, cuisine, ambience, etc.). Most people are more likely to settle for a restaurant that they find that is 'good enough' (against these criteria, although may be a compromise between different criteria) rather than perform an exhaustive search.

While satisficing may not always lead to the most optimal outcomes, it allows individuals to make decisions efficiently in complex and uncertain environments where complete information or exhaustive analysis is impractical or impossible. These decisions are not perfectly rational, rather their rationality is bounded by the constraints of human cognition, time, and effort exhausted.

Unlike rational choice theories, behavioural economics is grounded in empirical research. The concept of bounded rationality originated from observational studies of choice and has been further developed—most notably through the experimental work

of Kahneman (146, 147). Although some studies suggest that applicants do not engage in economically rational behaviour when choosing higher education institutions (148, 149), there has been little empirical research examining these decisions through a behavioural economics lens (150), and none that focuses specifically on medical school choice.

3.3 Consumer choice

Consumer choice theories build on neoclassical and behavioural economic theories of choice. They combine rational decision-making, focused on utility maximisation, with psychological and social factors that influence individual preferences and behaviours. By doing so, they aim to providing a comprehensive understanding of how consumers make purchasing decisions about goods and services.

Higher education can be considered a service (151). Within the UK students are increasingly adopting a consumerist approach to higher education (151, 152). If we consider prospective students as consumers, then it is helpful to consider how consumers make purchasing decisions in general before examining how these dynamics manifest in university choice.

In the 1960s Engel, Kollat, and Blackwell introduced a framework for understanding consumer behaviour, which evolved into the Consumer Decision Process model (153). This model outlines the stages that consumers typically progress through when make purchasing decisions: need recognition, search for information, pre-purchase evaluation of alternatives, purchase, consumption, post-consumption evaluation, divestment (Figure 3.4). Each is described below in more detail.

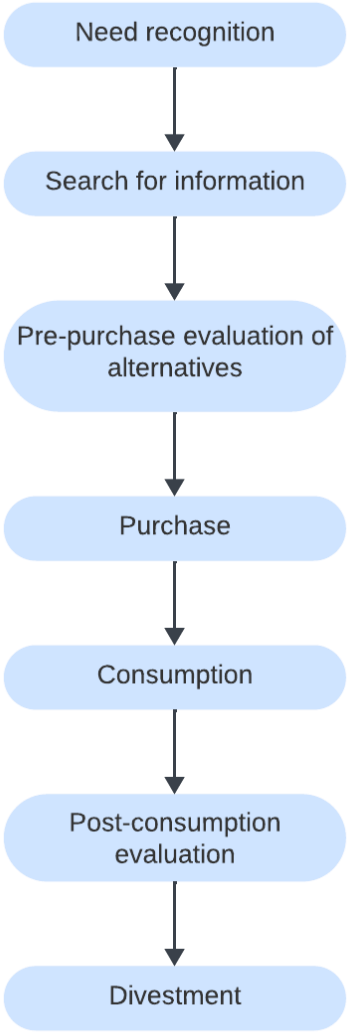

Figure 3.4 The Consumer Decision Process model, adapted from Blackwell, Miniard, and Engel (153)

Stage one: need recognition. This occurs when "an individual senses a difference between what he or she perceives to be the ideal versus that actual state of affairs" (153). Consumers may have both needs and desires, for example a person may *need* to eat food for dinner, and they may *desire* to have a takeaway. Consumers must recognise the need for a product or service before they consider which option will best meet their need. Need recognition can be influenced by both environmental factors (culture, social class, personal influences, family situation) and individual factors (resources motivation, knowledge, attitudes, personality, values, and lifestyle). For example, those aspiring to become doctors may recognise the need to go to medical school and then desire to go to a certain type of medical school.

Stage two: search for information. This involves gathering information about potential different products/services that will address the need identified at stage one. The

gathering of information may include both an internal search (retrieving knowledge from memory) and an external search for new information. The external search may involve discussions with others (peers, family members) as well as information from the marketplace. The sources of information can be categorised into marketer-dominated and nonmarketer-dominated. Marketer-dominated sources are those that are provided by the sources of the products or services, for example, websites, adverts, prospectuses, official social media accounts. Nonmarketer-dominated are those over which the providers have less control, such as word-of-mouth, reputation, and comparison websites.

Stage three: pre-purchase evaluation of alternatives. Here consumers seek to identify which possible products are available and, of those, which they prefer. Consumers evaluate potential options based on the new and existing information that they gathered in stage two. They employ evaluative criteria to compare and contrast different products and consider which they expect would give them the greatest utility. Lancaster (1966) argued that it was not goods themselves that provided utility, rather it was the characteristics of the goods from which utility was derived (154)

Using the example of medical school choice, Lancaster's theory would suggest that when comparing medical schools, applicants would consider the characteristics of each, such as geographical location, curricula style, league table rankings, and then determine based on those that are important for them. It is worth noting that some characteristics can be objectively quantified e.g. one medical school may be closer to home than another, one may be ranked higher than another. However, there are also characteristics that may be interpreted more subjectively, such as medical school size (some may prefer a larger school, others may prefer a smaller cohort).

The characteristics against which different options are evaluated can also be categorised into salient and determinant. Salient attributes are the characteristics that are most noticeable or prominent to consumers but that are not necessarily the most important when it comes to decision making (e.g. medical school buildings). This may be because these are considered to be less important or may be because the differences between potential options is considered to be minimal. Determinant attributes, on the other hand, are the characteristics that have the greatest impact on consumers' decision making (the attributes that determine choice for different individuals are likely to vary) (155).

Stage four: purchase. Here consumers decide which product to purchase and where they are going to purchase it. While this isn't directly transferable to medical school

applications, the closest comparison would be choosing to which (up to) four medical schools to make their applications.

Stage five: consumption. After consumers purchase their product or service they can consume or use it. The important distinction to make between consumption of medical education and other goods and services, is that medical students will only ever consume one undergraduate medical programme (and many unsuccessful applicants may never achieve this). This is unlike other goods, for example you may consume many pizzas over the course of your life, and if you choose to purchase a pizza you are almost certainly going to be in a position to consume it.

Stage six: post-consumption evaluation. Here consumers evaluate the extent to which the good or service gave them satisfaction, including how it did or did not meet their expectations. With consumption of normal goods and services this will influence the extent to which they would purchase these again. While medical students would not be applying for undergraduate medical programmes again, their post-consumption evaluation of their medical school remains important for three main reasons. Firstly, their experience of the programme and institution will influence the extent to which they would recommend it to other prospective applicants. Secondly, their experience may influence their progression at medical school; if they feel they have made the wrong choice this may make it harder for them to get on there. Finally, in the context of an increasing number of doctors pursuing postgraduate qualifications, their experiences at their medical school may influence their decisions to pursue further study at the same university.

Stage seven: divestment. This involves the disposal of material goods and is not applicable to the consumption of medical education.

The consumer decision process model explains the stages that consumers go through when making decisions about purchasing goods or services. It does not, however, explain *how* consumers go from considering all of the potential alternatives to making a final choice. Bounded rationality asserts that individuals are not necessarily even aware of all of the potential alternatives, let alone giving them all full consideration. Other consumer choice theorists propose that when individuals must select from a large range of options they do so in stages. Shocker *et al*. proposed a model of choice based on hierarchical 'sets' of alternatives from which individuals choose (156). They described four key sets of alternatives:

1) Universal set – all the possible products that could be purchased, even if they are unobtainable to an individual consumer.

2) Awareness set – the subset of the universal set of which the consumer is aware.

3) Consideration set – a purposefully constructed subset of the awareness set which the consumer gives consideration to choosing. These could be because they are considered salient or accessible.

4) Choice set – the subset of the consideration set that are the final set of alternatives considered before making a choice.

Others have built on this model to clarify that the universal set leads to both an awareness set and an unawareness set and that from the awareness set arises a consideration set, an inert set, and an inept set. The inept set consists of alternatives that consumers actively avoid or reject because they perceive them as unsuitable or undesirable. These alternatives are consciously disregarded before further consideration due to negative associations or experiences. The inert set refers to alternatives that consumers are aware of but do not seriously consider or actively contemplate purchasing. This could be because they do not perceive them to be attractive or viable choices.

This model of individual choice is known as the brand elimination framework and is illustrated in Figure 3.5. As per convention, directly measurable variables are represented in rectangles and latent variables (i.e. those that can be inferred theoretically or through research) are in ovals.

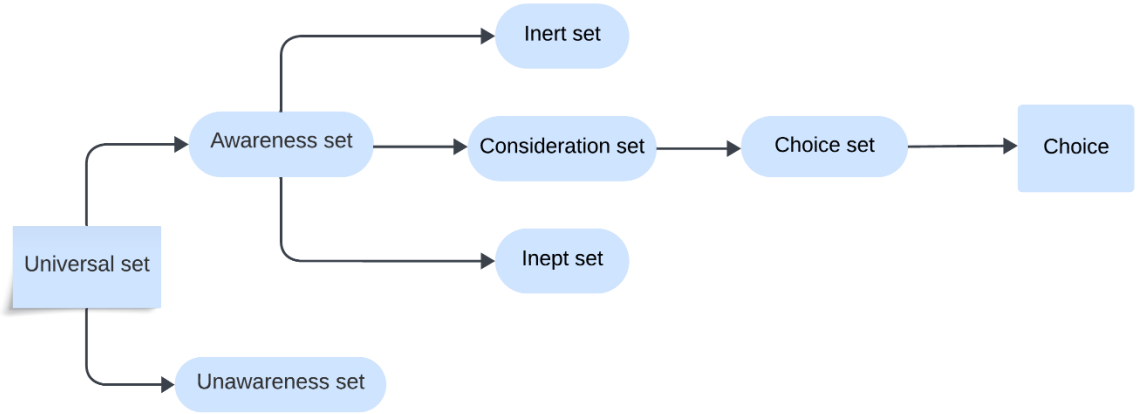

Figure 3.5. A model of individual choice, the brand elimination framework, adapted from Shocker et al. (156).

When choosing to purchase a good or service, assuming the range of alternatives considered are similar (i.e. all the same type of good or service), Hauser and Wernefelt cite an average consideration set size of two to eight (157). When moving

from consideration sets to choice sets, researchers have proposed consumers use both compensatory and non-compensatory models. Non-compensatory models would require that a good or service has certain characteristics or levels of characteristics for it to be considered at all. Compensatory models, on the other hand, involve a trade-off between the different characteristics inherent in each good or service.

Applying this brand elimination framework to medical school choice, the universal set is the list of UK medical schools offering undergraduate medical programmes. With the establishment of several new medical schools in recent years, even this does not remain fixed. Next there is the awareness set, this would be the list of medical schools an applicant is aware of. In most cases this is fewer than the universal set, though some applicants may compile a list of all of the institutions that offer medical programmes. Research has also demonstrated that applicants from non-traditional backgrounds are aware of fewer medical schools than their more traditional counterparts (158). From this awareness set, medical schools can be grouped into three subsets: consideration, inert, and inept. The inept set are those the applicant holds negative views about. The consideration set are those the applicant actively considers, finds more information about, and evaluates based on whichever criteria they value (Stages 2 and 3 of the consumer decision making model). The inert set are those which the applicant does not necessarily hold negative views about, but does not hold positive enough views about in order to invest the time and effort in to gathering sufficient information to fully consider them. For example, it is unlikely to be feasible or desirable to visit the open days of all the possible medical schools. Medical schools that they perceive to be non-viable would also fall into the inert set (e.g. a school leaver applicant would not consider medical schools that only offer graduate entry programmes). Finally, a choice set of up to four medical schools to apply to must be made. If the applicant is successfully offered a place study at more than one medical school, then they must again decide between the list of options.

3.4 Higher education choice

So far, I have discussed different theories of how individuals make choice decisions, including how consumers make choices regarding the purchase of goods and services. In this next section, I will examine how individuals make choices about which higher education institutions to apply to. It is important to recognise that higher education choice differs significantly from general consumer choice in several ways.

Most fundamentally, choosing a higher education institution is an important, high stakes decision. Many people make this choice only once in their lives. Unlike selecting a chocolate bar or bottle of wine, the decision to apply to a particular university carries substantial personal, financial, and professional implications. The degree of consideration is likely to reflect this (159). Blackwell *et al.* suggest that consumers undertake extended problem solving when the choice is considered to be of high personal importance or relevance (153). They describe highly important choices as those that are costly, that reflect on their own image, that are high risk if a wrong decision is made, and are subject to strong influence from others. Higher education choice is clearly highly important and will therefore be subject to more deliberate decision making than other less important choices.

Additionally, the majority of research on consumer choice focuses on frequently purchased products, where decision-making becomes routine over time, and consumers rely on past experiences with brands to inform future choices (stage six in the consumer decision process model). In contrast, most students will attend only one university, eliminating the possibility of drawing upon personal institutional experience. This lack of direct prior knowledge amplifies the complexity of decision-making in higher education choice.

Another key difference concerns cost. While many goods and services vary widely in price, tuition fees among UK universities have little variation, with the notable exception that Scottish-domiciled applicants can have their fees covered at Scottish universities. Nevertheless, other costs such as living expenses in expensive cities (particularly London) or the need to move away from home may influence applicant choices.

Despite these differences, much of the research on higher education choice uses a consumer decision-making lens. Drawing on the work of Jackson (160) and Litten (161), Hossler and Gallagher proposed a three-stage model of higher education choice (162):

- Phase 1 (Predisposition): students consider whether or not they want to attend higher education. Within the context of medical school choice this would also incorporate consideration of whether they wanted to pursue a career in medicine.
- Phase 2 (Search): Students find out about different options through research. They consider differences in attributes that characterise different universities

and decide which to value. During this phase they construct a choice set – the set of universities to which they will apply.

- Phase 3 (Choice): students decide which university they will attend.

This model can be seen as a simplified version of the Consumer Decision Process model (described in 3.3 above) applied to the specific context of higher education choice. A comparison of the higher education choice model, the consumer decision process model, and the brand elimination framework is presented in Table 3.1. Phase 1, predisposition, in the higher education choice model equates to Step 1, need recognition, in the CDP model. Phase 2, search, equates to steps 2 and 3, search for information and pre-purchase evaluation of alternatives, in the CDP model and from awareness set to consideration set in the brand elimination framework. Phase 3, choice, equates to step 4, purchase, in the CDP model and from choice set to choice in the brand elimination framework. Steps 5 to 7, consumption post-consumption evaluation, and divestment are not reflected in Hossler and Gallagher's model as these steps are less relevant to higher education choice for the reasons outlined above. While Hossler and Gallagher's model simplifies the stages of the CDP, it adds value in outlining the individual and organisational factors that influence applicants at different stages of the higher education choice decision making process.

Table 3.1. A comparison of models of consumer choice.

Higher Education Choice (162)	Consumer Decision Process model (153)	Brand Elimination Framework (156)
Phase 1. Predisposition	Step 1. Need recognition	
Phase 2. Search	Step 2. Search for information	Awareness set → consideration set
	Step 3. Pre-purchase evaluation of alternatives	Consideration set → choice set
Phase 3. Choice	Step 4. Purchase	Choice set → choice
	Step 5. Consumption	
	Step 6. Post-consumption evaluation	
	Step 7. Divestment	

During the predisposition phase, when individuals are deciding whether or not to pursue higher education, research has demonstrated that socioeconomic background (163), prior academic attainment (161), and encouragement from parents (164) and peers (162), all influence the decision-making process.

In 1977, Peters concluded that those from higher socioeconomic backgrounds were four times more likely to attend higher education than those from lower socioeconomic backgrounds (163). While there has been significant work to widen participation to higher education, socioeconomic status remains a significant factor in the predisposition phase (165). Conklin and Dailey demonstrated a significant positive linear relationship between parental encouragement to attend university and students' higher education plans (164). Peers appear to have a reinforcing effect on each other in the decision to attend higher education (162).

The schools that students attend for secondary education also play an important role in influencing predisposition to higher education. Those who attend higher status secondary schools are more likely to attend higher education. In addition to the influence of the academic curricula at these schools, involvement in student activities while in secondary education has been found to be positively related to predisposition to attend higher education and in applying to more selective institutions (166). Schools that offer more extracurricular opportunities can therefore predispose students to higher education as well as enabling them to have more competitive applications for more selective institutions.

From the predisposition phase of higher education choice, Jackson (167) describes three types of students: 'whiches', 'whethers', and 'nots'. *Whiches* are certain about attending university and only need to make a decision regarding which to apply to. *Whethers* are less certain but will investigate options and may apply to one or two. *Nots* never seriously consider attending university. Applied to medical school choice, *whiches* would be those who have known since a young age they wanted to be a doctor and are certain about applying to medical schools but need to decide which to choose. *Whethers* would be those that are exploring medicine as a subject choice as well as other course options and may investigate different courses at various universities. *Nots* would be those that have no intention on applying to medicine (but in this context could be considering applying to university for other subjects).

After this predisposition phase, the *whiches* and *whethers* will go on to search for information about different potential higher education options. This search phase is influenced by what students value in potential university options and the search

activities they conduct. Students with higher prior academic attainment have been found to conduct more sophisticated search phases (168). Students from low-income families, those from minority ethnic backgrounds, and those whose parents do not have prior experience of higher education appear to conduct less efficient searches that take longer (161). These students are more likely to rely on school counsellors for advice.

Hossler & Gallagher (162) argue that the most pervasive problem in the search phase is that students may limit their searches and eliminate options that may be a suitable choice for them. Considering the brand elimination framework, this could either be due to unawareness or perception of unviability (inert set) or undesirability (inept set). In the context of medical school choice this could lead to an unsuccessful application or undermatch.

It is worth highlighting that the search phase need not be considered as unidirectional. There is the opportunity here for universities to conduct search activities for students and to make themselves more visible to potential applicants through marketing and outreach activities.

Model dimensions	**Influential factors**		**Student outcomes**
	Individual factors	*Organisational factors*	
Predisposition (phase one)	Student characteristics Significant others Educational activities	School characteristics	Search for: • University options • Other options
Search (phase two)	Student preliminary college values Student search activities	University search activities (search for students)	Choice set Other options
Choice (phase three)	Choice set	University courtship activities	Choice

Figure 3.6 A three phase theoretical model of university choice - adapted from Hossler and Gallagher (162) based on their review of higher education choice.

In the final phase, choice, students construct a choice set and choose which universities to apply to. These decisions will be influenced by information they have gathered through the search phase.

Using the brand elimination framework, Dawes & Brown (159, 169) conducted a series of studies on higher education choice on a sample of 266 recent entrants to an undergraduate business degree course at one UK university. They found that university prospectuses and the UCAS handbook were the most frequently used sources of information by students (96.1% and 94.8% of students reported using each of these sources, respectively). The source of information that students reported as being most influential was university prospectuses (mean of 4.04 on a scale anchored at 1= low influence, 5=high influence). While fewer (75.5%) students reported attending open days and visits to universities, these were the second most influential sources of information (mean influence score = 3.94). It is important to note that this research was conducted when the internet was in its infancy and only 37.3% of students reported using university web pages.

When provided a restricted list of the 21 British universities most proximal to their current university, recently enrolled students were aware of a mean of 16.8 universities, considered a mean of 5.5, and had applied to a mean of 3.3 (159). Older students had larger awareness sets but smaller consideration and choice sets. Males had smaller awareness sets to females, but no difference in size of consideration and choice sets. Those who had parents who had attended university had similar sized awareness sets compared to those who were the first in their family to attend university. They did however have larger consideration sets, but ended up with similar sized choice sets. Those who started their search process earlier had larger awareness sets and larger consideration sets than those who started their search process closer to the deadline for applying to university. White students had smaller awareness sets, consideration sets, and choice sets compared to Indian, Pakistani, and Bangladeshi students.

Exploring the composition of different decision sets, Dawes & Brown (169) classified their restricted sample of 21 universities in to ‘old’ (pre-1992) and ‘new’ (post-1992) universities. They found that the vast majority (81.6%) of students had both old and new universities within their consideration sets. However, almost half (49.2%) did not include any old universities within their final choice set. Living proximal to their university, younger age, and Pakistani, Indian, or Bangladeshi ethnicity were associated with a higher proportion of old universities in a consideration set. Pakistani, Indian, or Bangladeshi ethnicity, younger age, and father not having

attended higher education were associated with higher proportion of old universities in their final choice set. It is worth highlighting that their sample was recruited from recent entrants at a new university. These students were therefore either unsuccessful in their applications to the old universities, or ultimately choose a new university instead. The findings of this research support the conclusion that applicants from different social backgrounds both consider, and to a lesser extent apply to, different types of university.

Stephenson *et al.* conducted a qualitative study of recent entrants to a public university in the USA[4] (77). They found that participants considered an average of only three institutions and over half of participants considered different types of institutions (e.g. private and public, small and large). The most important factors when constructing a choice set were: availability of the subject they wished to study, price, campus visits, perceptions of others, size, proximity to home, aesthetic of the campus, and how friendly and comfortable they perceived the campus to be. The availability of the subject is likely to be the most fundamental factor in institution choice for prospective medical students as only the minority of UK higher education institutions offer medical degrees. Price, in terms of tuition fees charged, is unlikely to be a significant factor In the UK as there is minimal variation between different medical schools, however there are other significant cost implications between different universities. It could also be argued that campus visits are a source of information rather than factors upon which potential choices are compared. These visits are, however, likely to be the best sources of information on the aesthetic and perceived friendliness of the campuses which were other important factors in Stephenson's study.

Conclusion

In this chapter I have discussed theoretical frameworks that underpin choice behaviour including classical, neoclassical, and behavioural economic theories, how these have informed consumer choice theories and how this adds to our understanding of the complex process of higher education choice. While economic models emphasise rational decision-making based on costs and benefits, consumer choice perspectives account for the nuanced ways in which preferences, perceptions, and constraints shape individual decisions. Some studies have used these theoretical models to explore higher education choice. However there have been no theory

[4] In the USA, a public university is one which received significant funding from the government, whereas a private university does not.

informed studies of medical school choice. To examine the medical school choice process and its relationship with socioeconomic background empirically, the following chapter outlines the methodology and methods I employed in this study, detailing the research design, data collection, and analytical approach.

Chapter 4. Methods

I conducted a large, national qualitative interview study to explore the decision-making processes of individuals applying to medical schools in the UK, with a focus on understanding how they construct their choices. The research question I sought to answer was:

> **How do applicants from different socioeconomic backgrounds choose which medical schools to apply to?**

4.1 Context

I conducted the study in the UK. Details of medical school admissions procedures are outlined in Chapter 2. However, it is worth additionally highlighting the differences in secondary school types in the UK as the participants in this study were school students at the time of making their choices of medical schools and previous research has demonstrated that school type may be an important influence. There are many different types of secondary schools in the UK (170). The most pertinent differences between these schools for the purposes of understanding medical school applications are how the schools are funded and who is eligible to attend.

- State funded, non-selective, schools (e.g., comprehensive schools) are funded through national taxation and accept any children within a specified geographical area.
- State funded, selective, schools (i.e. grammar schools) are also funded through national taxation, but accept students based on academic ability as measured on a national exam at age 11.
- Private schools (also known as independent schools) are funded through tuition fees and generally accept students based on academic ability.

4.2 Theoretical perspective

In this study, I adopted a subjectivist inductive approach, grounded in a constructionist ontology and an interpretivist epistemology (171). I chose qualitative methods because there is limited existing research on the topic of medical school applicants' decision-making, and I wanted to generate theory rather than test pre-existing hypotheses (172).

From an ontological perspective, I assumed that reality is socially constructed. In this study, this means that the decision-making processes of prospective medical

applicants are not fixed or objective but shaped by each individual's beliefs, values, and social contexts. I recognised that different applicants would have diverse experiences and perceptions, and I sought to explore how these factors influenced their decisions. This constructionist view allowed me to focus on the meanings and interpretations that participants attached to their experiences, rather than looking for objective truths (173).

Epistemologically**,** I adopted an interpretivist approach, which meant that I aimed to understand the meanings behind participants' actions and experiences from their own perspectives(174). I did not seek to establish generalisable laws or test hypotheses but instead wanted to interpret the social phenomena within their specific contexts. My goal was to understand how applicants make sense of their medical school application process and the factors that influenced their choices, recognising that these factors may vary across individuals and different socioeconomic groups.

The initial analysis (presented in Chapter 6) followed a fully inductive approach, as I aimed to generate theory grounded in the data itself. Given the lack of prior research on this specific topic, I did not want to start with predefined theories or frameworks but instead allowed the data to guide me in constructing new insights and patterns. This approach aligns with the qualitative methods I chose, as I wanted to explore the complex and subjective experiences of the participants in-depth. Subsequent analyses were sensitised to theories of capital (175-177) and choice (as discussed in Chapter 3).

Qualitative methods were particularly appropriate for this research because they enabled me to capture the richness and complexity of participants' experiences, something that quantitative methods would not allow. Quantitative approaches, with their focus on numerical data and statistical analysis, are useful for examining broad trends across large populations, but they can't provide the in-depth, context-rich insights that qualitative research offers. In contrast, qualitative methods allow me to explore the meanings that individuals attach to their experiences and decisions, and how these meanings vary depending on their social backgrounds, application stages, and choices of medical schools. Given the exploratory nature of this research, qualitative methods provide a deeper understanding of the subjective, personal factors influencing applicants' decisions, which is essential when there is little prior research in the area.

This PhD was part of a wider programme of research, which included a national questionnaire aimed at all applicants to UK medical schools in 2020 (158). The

insights I generated from the PhD informed the design of the questionnaire, ensuring it captured the relevant factors influencing applicants' decisions. By beginning with qualitative data, I was able to inform the development of the national survey with a deeper understanding of the topic, ensuring that the questions were rooted in the conceptualisations of applicants and relevant factors influencing applicants' decisions.

4.3 Sampling

I employed stratified purposive sampling, an approach that targets specific groups which vary according to key characteristics, even though individuals within each group may be relatively homogeneous (178). Unlike quantitative studies, which rely on probability sampling, qualitative research does not require statistical representativeness. Instead, participants are selected to reflect key characteristics that are relevant to the research objectives. In this study, while statistical representativeness was not a goal, the aim was to produce findings that are transferable to the broader population of interest—that is, all applicants to undergraduate medicine in the UK.

To address the research question, I considered there were three key characteristics that would be essential in the sampling process: participants' social backgrounds, their stage in the application process, and the medical schools to which they were applying (or planning to apply). Consequently, the sampling strategy was designed to ensure stratification based on these factors.

Socioeconomic backgrounds

For this study I was interested in the differences between ‘traditional’ (i.e. those from groups that are well represented in medical schools) and ‘non-traditional’ (i.e. those from groups that have historically been underrepresented in medical schools) applicants. There is no clear or universally shared definition of what constitutes a ‘non-traditional applicant’ (179) and different medical schools use different criteria when considering eligibility for programmes aimed at widening participation(15). For the purposes of this study, I argue that ‘traditional’ and ‘non-traditional’ backgrounds are not binary but rather exist on a continuum. I chose to categorise participants along a spectrum, from non-traditional to traditional rather than being strictly one or the other. As such, I constructed a composite definition of ‘traditional’ and ‘non-traditional’ based on several indicators that are commonly used both in research and practice (see Table 4.1).

For defining eligibility for contextual admissions, the Medical Schools Council recommends using individual-level, area-level, and school-level criteria (180). In line with these recommendations, I have selected relevant criteria at each of these levels to identify attributes that reflect a more traditional background (Table 4.1).

For the *individual level*, I selected parental experience of higher education as an indicator. I defined having a parent with a university degree as a traditional attribute, while not having any parents with a university degree (i.e., being a "first in family" applicant) was considered a non-traditional attribute. For this level I could have selected from a number of indicators that are typically used (e.g. total household income, eligibility for free school meals, receipt of means tested benefits). Parental experience of higher education was deemed an appropriate measure, as participants could readily provide this information. Additionally, it may be perceived as less sensitive than questions about income or benefit receipt and has been shown in prior research to be an important factor (181, 182).

At the *school level*, I selected type of school attended as an indicator. Attending a fee-paying school was categorised as a traditional attribute, while attending a state-funded school was considered a non-traditional attribute.

For the *area level*, I selected two indicators. These measures were chosen as they are readily available and the most common area level indicators used by UK medical schools(15). They are also the indicators against targets were set in the final report of the selecting for excellence project (17). For these indicators I used the same cut offs as are typically employed by Medical Schools Council, individual medical schools, and the Office for Students.

1. The Index of Multiple Deprivation (IMD) 2015: The IMD is a composite measure of area-level deprivation that includes seven domains: income deprivation, employment deprivation, health deprivation and disability, education, skills and training deprivation, barriers to housing and services, crime, and living environment deprivation (183). The IMD ranks 32,844 small areas (neighbourhoods) within England from the most deprived to the least deprived. I derived the IMD score from participants' postcodes, defining those living in the least deprived 80% of areas as a traditional attribute, and those in the most deprived 20% as a non-traditional attribute.
2. POLAR 4 : POLAR 4 is an area-based measure of the proportion of young people who participate in higher education (184). I derived the POLAR 4 score from participants' postcodes and defined living in the two quintiles with the

lowest participation as a non-traditional attribute, and living in the three quintiles with the highest participation as a traditional attribute.

For the area-level criteria, I defined living in both the most deprived quintile of IMD and the lowest two quintiles of POLAR4 as a non-traditional attribute. Conversely, living in any of the four least deprived quintiles of IMD or the three quintiles of highest education participation in POLAR4 was considered a traditional attribute.

I categorised participants on a four-point scale, from non-traditional to traditional, based on the number of traditional attributes they possessed with equal weighting. According to this categorisation:

- *Non-traditional applicants* were those who were first in their family to attend higher education, attended state-funded secondary schools, and lived in areas characterised by both low higher education participation and high deprivation.
- *Traditional applicants* were those who had parents with higher education degrees, attended fee-paying secondary schools, and lived in areas of high higher education participation and low deprivation.

Applicants who had one traditional attribute were categorised as less traditional, while those who had two traditional attributes were categorised as more traditional.

Table 4.1. Traditional and non-traditional attributes.

Level	Attribute	Non-traditional indicator	Traditional indicator
Individual	Parental higher education	First in family for higher education	Parent(s) have degree(s) including medical degrees
School	Secondary school type	State funded school	Fee paying school
Area	Area level higher education participation and deprivation	POLAR 4 quintile 1 or 2 and/or IMD quintile 1	POLAR 4 quintile 3-5 and/or IMD quintile 2-5

Medical school choices

At the time of data collection (2018), there were 34 UK medical schools approved by the General Medical Council (GMC). Additionally, three UK medical schools and two international programmes were undergoing the approval process.

Research conducted for the Medical Schools Council Selection Alliance (MSC-SA) in 2013 demonstrated that application to UK medical schools exhibited systematic grouping, with seven distinct clusters identified (33). The findings suggest that applicants to schools in each cluster were more likely to apply to other schools within that same cluster. In order to capture perspectives from participants who had applied or were likely to apply to a wide range of UK medical schools, I selected one school from each of the seven clusters for recruitment (see Table 4.2). However, due to recruitment challenges at the cluster six school (resulting from limited access to potential participants), I selected a second school from that cluster to ensure sufficient representation. As part of the ethics approval requirements, the medical schools through which participants were recruited will not be named.

Table 4.2. Clusters of co-application among UK medical schools, replicated from Garrud (2014) (33)

Cluster	Medical Schools
1	University of Aberdeen, University of Dundee, University of Edinburgh, University of Glasgow, and University of St Andrews.
2	University of Exeter, University of Plymouth, St. George's University of London, Swansea University, and University of Nottingham
3	King's College London, Queen Mary University London, University of Southampton, and University of Warwick
4	Imperial College London, University College London, University of Oxford, and University of Cambridge
5	University of Leeds, University of Sheffield, University of Manchester, Newcastle University, University of Leicester, and Hull York Medical School
6	University of East Anglia, Keele University, and Brighton and Sussex Medical School
7	Lancaster University, University of Liverpool, University of Birmingham, University of Bristol, and Cardiff University

Stages of application

I recruited applicants at various stages of the application process, ranging from those who were seriously considering applying to medical schools, to those currently in their first year studying medicine and reflecting back on their application experiences (see Table 4.3). This approach allowed me to capture a diverse range of perspectives. Specifically, I recruited participants who were currently making their choices or had only recently made them to minimise recall bias. By focusing on those in the process or just after making their decisions, I could ensure that their reflections on the application process were fresh and more accurate. Additionally, I sought to include the perspectives of both successful applicants and those who might not have been successful in gaining entry. This was crucial for obtaining a comprehensive understanding of the factors that influence application decisions, as it allowed me to explore not only the experiences of those who secured a place in medical school but also the insights of those whose applications might have been unsuccessful. Including a range of outcomes provides a fuller picture of the challenges and considerations faced by applicants throughout the process.

Table 4.3. Participants' stages of application to medical school.

Stage of application	Description
Potential applicant	Those who were seriously considering applying to medical school in the following application cycle.
Applicant	Those who have applied to medical schools in the current application cycle.
Reapplicant	Those who have previously made an unsuccessful application to medical schools and have either re-applied or are seriously considering re-applying (including those applying to graduate entry medicine courses)
Current student	Those who have made a successful application to medical school and are in their first year of a medical degree.

4.4 Recruitment

The method of recruitment varied between medical schools and across different groups within each school. This variation was largely pragmatic, based on the

methods that the admissions lead at each medical school deemed appropriate and effective for recruiting potential participants. The recruitment strategies I employed included mass emails, attendance at open days or offer-holder visit days, attendance at widening participation schemes, and making announcements in lectures. Table 4.4 provides a summary of the recruitment approaches used at each medical school, with full details available in Appendix 1.

Table 4.4. Summary of recruitment approaches at different schools.

School	Attended open day	Attended offer holder visit day	Details on offer letter	Attended widening participation scheme	Mass email to widening participation scheme	Shout out at first year lecture	Mass email to first year students
School 1		✓			✓		✓
School 2				✓		✓	
School 3				✓		✓	✓
School 4					✓	✓	
School 5			✓			✓	✓
School 6				✓			✓
School 7	✓						✓
School 8				✓	✓	✓	

4.5 Sample size

I aimed to recruit a total of 70 participants, consisting of five (potential) applicants and five first-year medical students from each of the seven clusters of medical schools. This sample size was selected with the goal of providing sufficient depth and diversity in the data, while balancing the practical constraints of time and resources (185).

The choice to recruit 10 participants from each of the seven clusters—comprising both prospective applicants and first-year medical students from different socioeconomic groups—was intended to ensure a broad range of perspectives. The stratified purposive sampling strategy would allow for comparative analysis across different socioeconomic groups. This comparative aspect to the analysis allowed for greater nuance and explanatory power in the theory developed from the research.

A sample size of 70 participants is justified based on information power, a key concept in qualitative research, which posits that the depth and richness of data gathered from in-depth interviews contribute significantly to the adequacy of a sample size (186).

According to this concept, the power of the data is influenced by several factors, including the study's focus, the quality of the data, and the number of participants (186). Since this study relied on in-depth interviews, each participant was expected to provide detailed, reflective insights into their experiences and perceptions, which would generate rich data that offers significant depth. Given that the interviews were designed to explore complex and subjective factors, such as applicants' decision-making and experiences, fewer participants are typically required to generate sufficient insights for analysis compared to studies with more surface-level data collection methods.

Guidance on sample size in qualitative research suggests that studies involving homogeneous participants typically require around 20-30 interviews (185). However, studies that compare sub-populations, as in this thesis, are likely to require a larger number of participants to capture the diversity of experiences and ensure that comparisons across different groups can be effectively made (185). In this case, recruiting 70 participants allows for the inclusion of multiple sub-groups, which strengthens the study's ability to identify patterns across varying socioeconomic backgrounds.

4.6 Data collection

Data collection methods

I conducted semi-structured interviews between January 2018 and January 2019. Initially, the plan was to offer both individual and group interviews, but after conducting the first group interview, I felt that I was not able to fully explore each participant's perspective in sufficient depth. As a result, I decided to prioritise individual interviews for the remainder of the data collection.

I prioritised one-to-one interviews for several reasons. First, given the diverse backgrounds of the participants, I believed that a one-to-one setting would allow me to explore their experiences and social backgrounds in greater depth, even if this meant missing the potential for interaction that might occur in a group interview. Second, because of the sensitive nature of the topic, I thought participants might feel more comfortable and be prepared to be more candid in a one-to-one setting. Third, since much of the data collection was conducted remotely via telephone, I felt that conducting group telephone interviews would be logistically challenging and difficult to moderate. Additionally, data collection occurred before group videoconferencing platforms (e.g., MS Teams, Zoom) became widely popular and accessible.

I conducted the majority of the interviews. In instances where I was unavailable, another researcher from the wider research programme conducted the interviews. All researchers who contributed to the data collection attended a half-day interviewer training workshop. During the workshop, I explained the rationale for the study, and the researchers familiarised themselves with the interview schedules. This training ensured consistency in our interviewing techniques and alignment with the study's objectives.

The interviewer audio-recorded the interviews in duplicate using portable digital recording devices. A professional, independent transcription company transcribed the recordings verbatim. I pseudo-anonymised the transcripts and redacted any identifiable information to ensure confidentiality.

During the individual interviews, the interviewer took notes to assist with structuring the conversation and to identify areas that could be explored further later in the interview. These notes helped them to ensure that key topics were addressed and allowed for flexibility in exploring emerging topics.

At the start of each interview, the interviewer had participants complete a background survey to collect information on individual-level (e.g., parental higher education experience), area-level (e.g., deprivation based on participant postcode), and school-level (e.g., state or private schooling) factors. I used these indicators to categorise participants along a spectrum of traditional to non-traditional backgrounds, as discussed earlier (see Appendices 2 & 3).

Setting

We conducted the Interviews either face-to-face or over the telephone, according to participant preference and availability. I conducted the one group interview in the building of the participating medical school. For the individual interviews, only the participant and the interviewer were present. In contrast, for the group interview, a second researcher was also present, in addition to the participants and myself. The second researcher took field notes to assist in attributing comments to individual members of the focus group and to help recall non-verbal communication.

Interview schedule

I conducted the interviews following a schedule broadly divided into four stages (187). I created different versions of the interview schedule, with wording tailored to participants' stage in the application process. The focus group topic guide followed the same topics as the individual interviews (see Appendix 4).

Stage 1 – Introduction

At the start of the interview, I introduced myself to the participant and began building rapport through small talk. I then reiterated the purpose of the interview, explaining that it would be audio-recorded and professionally transcribed, but that all contributions would remain anonymised. At the end of this stage, I confirmed that the participant remained willing to proceed with the interview and then started the audio recording.

Stage 2 – Background and contextual information

This stage of the interview was designed to ease the participant into the conversation by asking low-risk, easy-to-discuss topics to help them open up and further develop rapport. I asked participants to tell me about themselves, including where they lived and with whom.

Stage 3 – Core part of the interview

In the core part of the interview, I focused on exploring participants' motivations for studying medicine and their future career aspirations. I inquired about how they chose, or were choosing, which medical schools to apply to, and how they obtained information regarding different medical schools to inform their decision-making process. During this stage, I used various types of questions as outlined by Brinkmann & Kvale (187) (Table 4.5).

Stage 4 – Winding down

In the final part of the interview, I signposted that we were nearing the end and that all the topics I intended to cover had been explored. I then provided the participants with an opportunity to clarify any answers or raise any important points they felt had not been addressed during the interview.

Table 4.5. Types of questions employed in the interview schedule.

Question type	Definition	Example question
Introductory question	Broad and open questions to start to explore a topic.	Can you describe what the perfect medical school would look like for you?
Follow-up question	Encouraging further elaboration through nonverbal cues or repeating key words.	Yeah?
Probing questions	Open questions used to encourage participants to elaborate on their response without specifying a focus.	Can you tell me more about that?
Specifying questions	Questions used to encourage participants to provide more detail on a specified aspect of their response.	Can you talk me through how you considered which medical schools to apply to?
Direct questions	Asking directly about a specific topic.	Is there anything that you think might work against you?
Indirect questions	Asking questions to indirectly explore a topic while trying to avoid leading the participant's response	If you don't study medicine, what do you think you will you do instead?
Structuring questions	Using statements to signpost a change in topic within the interview.	I'm now going to move on to asking you about the information you used to choose a medical school.
Silence	Using silence to encourage the participant to elaborate on their answer.	-
Interpreting questions	Checking that a response has been interpreted correctly.	Do you mean you would prefer x?

Piloting

I piloted the interview schedule with three recent medical graduates before beginning data collection. This allowed me to ensure that all questions were clear and comprehensible, and to identify any potential risk of participant fatigue. As a result of the piloting process, I made minor amendments to the interview schedule to improve clarity and flow.

4.7 Data analysis

In this section, I describe my approach to analysing the full dataset, as well as the three focused analyses exploring participants' priorities, resources and constraints, and strategies. Further details for subsequent analyses for the results presented in Chapters 7 and 8 are the corresponding chapters.

I analysed the transcripts using framework analysis, a method chosen for its ability to remain grounded in the data, cover the data comprehensively, and facilitate both within- and between-case comparisons (188). Framework analysis is particularly useful for handling large qualitative datasets as it balances the breadth of data from all participants with the depth of individual accounts. Additionally, it has the unique strength of enabling cross-group comparisons in qualitative data, which was essential for this study in order to build explanatory theory that accounted for differences between groups.

Data Management

I followed the five stages of data management in framework analysis as described by Spencer et al. (189).

Stage 1 – Familiarisation

I began analysis by familiarising myself with the data. Having personally conducted most of the interviews, I was already immersed in the data. However, to ensure I was fully familiar with it, I re-listened to the original audio files and read through the transcripts. This process also served to verify the accuracy of the transcripts. Approximately half of the transcripts had been checked for accuracy by an administrator in the department, and I checked the remaining transcripts myself. For the interviews checked by the administrator, I read the transcripts to familiarise myself with the content and listened to the audio while coding to further ensure accuracy.

Stage 2 – Constructing an initial thematic framework

Myself, my two supervisors (KW and KM) and a research associate (DH) independently analysed the transcripts of four interviews to identify thematic codes. These interviews were chosen to represent traditional and non-traditional medical students and applicants. Afterward, we met to discuss these themes and generate an initial thematic framework. The framework was initially descriptive, and we refined it further through ongoing discussion and re-reading of the transcripts. I then developed a thematic codebook that provided brief and full descriptions of each code, guidance on when to use and avoid certain codes, and example quotes.

I uploaded all transcripts to NVivo (NVivo Qualitative Data Analysis Software; QSR International Pty Ltd., Version 10, 2012) to facilitate analysis. The research team then independently coded an additional two transcripts to evaluate how well the initial thematic framework worked. We discussed the results and refined the framework, and I further revised and clarified the codebook.

Stage 3 – Indexing and sorting

This stage involved making the data more manageable by sorting it according to themes, which facilitated more analytical analysis. I coded all transcripts using the initial thematic framework, and to ensure consistency, I had another researcher (KW) independently code a 20% sample of the transcripts.

Stage 4 – Reviewing data extracts

Once the data was coded by themes and subthemes, the initial coding framework was refined. I reviewed data extracts for each code to ensure internal coherence and external heterogeneity. I finalised the thematic framework by merging similar themes and splicing those with disparate data.

Stage 5 – Data summary and display

I created three framework matrices to display themes and subthemes against individual participants, grouped by socioeconomic backgrounds. I reviewed each subtheme, creating a précis for each participant’s comments coded to that subtheme. While doing this, I made an effort to preserve the participants' original terms, adding my interpretations in italics where necessary. After reviewing each subtheme, I revisited the full transcripts, paying special attention to any subthemes with no content coded against them. If these subthemes were truly not discussed, I denoted this in the corresponding cell. During this process, I also scrutinised the précis to ensure they accurately represented the participants’ views throughout the interview. This

case-by-case review also assisted in starting to identify relationships between subthemes.

Abstraction and interpretation

Constructing categories

After summarising all the data by individual cases, sorted by socioeconomic category (from least traditional to most traditional), I developed categories describing the range of things participants said about different themes. Although this stage remained largely descriptive, subsequent iterations moved from surface-level features to deeper levels of analysis.

Identifying linkage

At this point, I explored associations between different themes, as well as between participants' social backgrounds and the themes.

Accounting for patterns

In the final stage of analysis, I developed explanations for patterns identified in the data. This step followed a retroductive logic of analysis, which involved generating explanations based on participants' explicit or implicit accounts (189). I also explored existing theories to help explain the relationships between different themes and between participant attributes and themes (190).

I held discussions with the research team throughout each stage of analysis to draw on individual researchers' expertise, offer different interpretations, and ensure a thorough examination of the patterns identified in the data.

4.8 Reflexivity

Recognising that, within social constructionism, knowledge is considered to be generated through the interaction between researchers and participants, it is important to acknowledge that the backgrounds of the research team can influence the findings (191). I have made a concerted effort to maintain reflexivity throughout the data collection and analysis process. Early in the research, I met with the other members of the research team to discuss our previous experiences and individual orientations toward the research study. To enhance reflexivity, we completed a tool consisting of orienting questions designed to optimise reflexivity in team-based qualitative research (192). We shared our responses within the team, and revisited these during later phases of analysis to ensure that our interpretations of the data were not influenced by personal biases.

Furthermore, I provide the following background information on the research team's characteristics, which may help to contextualise the research:

- I am a medical doctor undertaking a PhD in medical education. I am the son of two English teachers and attended a state-funded comprehensive secondary school. For sixth form, I attended a local state-funded further education college. I applied to medical school during my A-Levels but was unsuccessful in gaining a place on my first attempt. I took a gap year, reapplied, and received an offer from Keele University in 2009. Keele offered a hybrid spiral curriculum, which included early clinical experience and a strong emphasis on community-based medical education. I developed an early interest in medical education and undertook a student-selected component in medical education in my third year. During this time, Keele was piloting the introduction of MMIs, and I became interested in this approach to admissions interviewing. I developed, piloted, and evaluated a student-run station that was later adopted into the MMIs. For three years, I regularly interviewed applicants using the student MMI station. At the time of data collection, I was a full-time PhD student. During the analysis and writing-up stages, I was also completing specialist training as a general practitioner and working part-time as a lecturer in postgraduate medical education at Keele University.
- At the time the research took place, DH was a postdoctoral research associate in medical education with a background in admissions aptitude testing. DH also has experience as a secondary school teacher and attended a state-funded secondary school. DH has since moved to an educational role at the Royal College of Physicians.
- KM is a medical education researcher with a background as an NHS clinical scientist. KM attended a state-funded secondary school.
- KW is a non-clinical medical education researcher with a background in psychology. She completed her PhD in psychology and medical education, focusing on ethnic inequalities in the academic performance of medical students. Much of her research and educational work has focused on undercovering and tackling inequity in medical careers, including widening participation. KW attended a state-funded sixth form in England after attending an international secondary school. Neither of her parents had a degree when she was a teenager, one of her parents subsequently achieved a Master's degree related to their work.

By sharing these details, I aim to make transparent how our personal and professional backgrounds may have shaped the research process. As a team, we discussed our relevant experiences and positionality in relation to the research and how these might influence the analysis.

4.9 Rigour

To ensure the rigour of this study, I focused on four key aspects: credibility, dependability, confirmability, and transferability (193). Each of these criteria plays a crucial role in establishing the trustworthiness and validity of qualitative research findings.

Credibility

Credibility refers to the confidence in the truth of the research findings, ensuring that they accurately represent the participants' experiences and perceptions. To enhance credibility, I employed two key strategies:

- *Prolonged engagement*. I spent a significant amount of time with participants through in-depth interviews, allowing them to fully express their views. This helped me build rapport and trust, which in turn encouraged participants to share richer and more detailed accounts of their experiences.
- *Debriefing.* I regularly discussed the evolving findings and the interpretation of the data with the research team. These discussions provided an opportunity to challenge assumptions, ensure consistency, and avoid bias in the analysis process.

Dependability

Dependability involves ensuring that the research process is consistent and repeatable. To establish dependability, I followed a transparent and systematic approach to data collection and analysis:

- *Audit trail*. I maintained a detailed record of the entire research process, including decisions made during data collection, coding, and analysis. This record provides a clear account of the research journey, allowing others to follow the rationale behind key decisions.
- *Clear documentation of methods*. The methods for data collection, such as interview procedures and thematic coding, were clearly documented and followed consistently throughout the study.

- *Regular team discussions.* I met regularly with my supervisors and members of the wider team to review the progress of the study, discuss themes, and ensure that the approach to data collection and analysis was rigorous.

Confirmability

Confirmability refers to the objectivity of the study, ensuring that the findings are based on the data. I implemented several strategies to ensure confirmability:

- *Reflexivity.* As discussed above, I maintained reflexivity throughout the study by reflecting on my own background, assumptions, and biases, and considering how these might influence the data collection and interpretation. This helped me remain aware of the potential for bias and made sure that the data guided the analysis.
- *Triangulation.* I used data triangulation by collecting data from a diverse range of participants (e.g., applicants and first-year medical students) and from multiple medical schools. This allowed me to compare perspectives across different groups and ensured a rich and varied understanding of the topic.

Transferability

Transferability refers to the extent to which the findings of the study can be applied to other settings or groups. While qualitative research is not aimed at generalisation, I took steps to enhance the transferability of the findings:

- *Thick description*. I provided detailed and comprehensive descriptions of the study context, participants, and data collection procedures. This allows readers to assess the extent to which the findings may be applicable to other settings with similar characteristics.
- *Purposive sampling.* I used purposive sampling to select participants from diverse backgrounds, stages of the application process, and medical schools. This diversity in participants' experiences enhanced the breadth and applicability of the findings.
- *Contextual understanding.* I considered the social and institutional contexts of participants when interpreting the data, acknowledging the potential influence of factors such as socioeconomic background on their decision-making processes. This consideration helped to ensure that the findings were grounded in the specific contexts of the study while also enabling comparisons to be made to other settings.

4.10 Ethics

This study was approved by the University College London Research Ethics Committee (reference: 0511/013) and received approval via chair's action at the other seven participating medical schools. There were four key ethical issues considered in this study: informed consent, voluntary participation, confidentiality, and data protection (194).

Informed Consent

Participants in this study were medical school applicants and first-year medical students. The majority of participants were young people aged 16 to 18, who are capable of consenting for themselves. However, due to their relative vulnerability compared to older participants, I took extra care to ensure they fully understood the study and their participation. As with all consent processes, it was essential that participants received sufficient information to make an informed decision.

Potential participants were provided with a participant information sheet (see Appendix 5) and given adequate time to read and absorb the information. They were also encouraged to ask any questions they had. Participants completed a paper consent form prior to the interview (see Appendix 6). At the start of each interview, I reminded participants of the key points from the information sheet and gave them the opportunity to ask any final questions before confirming their consent.

Voluntary participation

For approximately half of the participants, who were applicants or potential applicants to medical schools, there was a risk that they might perceive participation as influencing their chances of receiving an offer from a medical school or that non-participation could be seen unfavourably. To mitigate this, I made it clear in all invitations that the study was entirely independent of the medical school selection processes. I also assured participants that members of the research team would not be involved in any selection processes for the duration of the study, and that no information about participants, or those who chose not to participate, would be shared with medical school admissions staff.

For the other half of the participants, who were current medical students, it was crucial to ensure they did not feel coerced into participating by their medical school. I emphasised in all communications that participation was voluntary and that there would be no consequences for choosing not to participate. I also assured them that

their participation status would not be shared with teaching staff at their medical school.

Participation was completely voluntary for both groups, and no incentives were offered.

Confidentiality

I assured participants that their contributions would remain confidential, and that any data reported would be anonymised so that they could not be identified. If their quotes were included in any written reports, publications, or presentations, they would be redacted to maintain participants' anonymity.

Data protection

Participants completed a socio-demographic form to help categorise their social background. This form collected sensitive personal data, including ethnicity. Participants were informed in writing about how this data, along with the data collected from their interviews, would be processed and stored in accordance with data protection legislation, including the General Data Protection Regulation (2018).

Chapter 5. Participants

Sixty-six individuals participated in 61 individual interviews and one group interview. Thirty-five participants were (potential) applicants, and 31 were current medical students. The interviews lasted a mean of 54 minutes (range 22-113). The full details of each participant is provided in Table 5.1. As can be seen in Figure 5.1, there were only two traditional participants. This may have been because many participants were recruited through widening participation activities in an attempt to ensure participants from lower socioeconomic backgrounds were included.

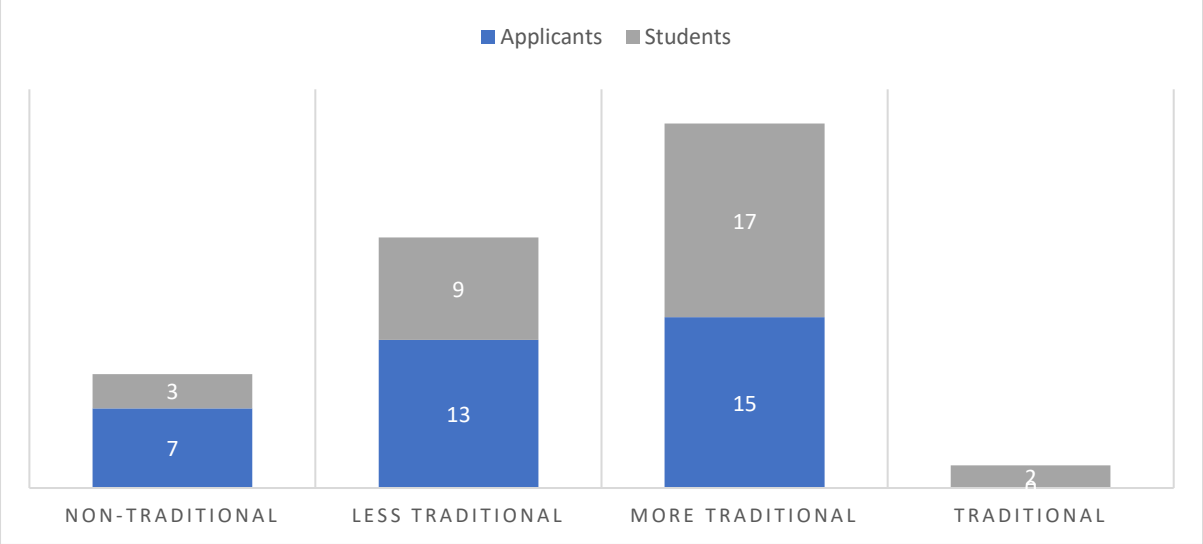

Figure 5.1 Overview of participant categories.

Table 5.1. Participant demographics

Participant ID	Applicant or student	School cluster	Parental higher education	School type	POLAR4 young participation quintile	Index of Multiple Deprivation Decile	No. Traditional attributes	Category
Chloe	Student	2	Yes	State funded, non selective	5	8	2	more traditional
Ali	Applicant	3	No	State funded, selective	1	10	0	non traditional
Ahmed	Applicant	5	Yes	State funded, non selective	3	6	2	more traditional
Emily	Applicant	3	No	State funded, selective	1	1	0	non traditional
Caitlin	Applicant	5	No	State funded, selective	5	5	1	less traditional
Kamal	Student	4	No	State funded, non selective	1	4	0	non traditional
Megan	Student	3	Yes	Fee paying	5	9	3	traditional
Ayesha	Applicant	4	No	State funded, non selective	4	5	1	less traditional
Jessica	Applicant	1	Yes	State funded, non selective	5	9	2	more traditional
Charlotte	Applicant	3	No	State funded, non selective	4	5	1	less traditional
Jack	Student	6	No	State funded, non selective	3	8	1	less traditional
Lauren	Applicant	7	Yes	State funded, selective	3	7	2	more traditional
Thomas	Student	6	Yes	State funded, non selective	5	9	2	more traditional
Amir	Student	4	No	State funded, non selective	4	1	0	non traditional
Andrei	Student	2	No	State funded, selective	5	7	1	less traditional
Sophie	Student	7	No	State funded, selective	5	7	2	more traditional
Olivia	Student	7	Yes	State funded, non selective	4	10	2	more traditional
James	Student	3	No	State funded, non selective	5	10	1	less traditional
Emmanuel	Student	3	Yes	State funded, non selective	2	2	1	less traditional
Hannah	Student	7	No	Fee paying	4	9	2	more traditional
Rachel	Applicant	1	Yes	State funded, non selective	2	2	1	less traditional
Erin	Applicant	1	Yes	State funded, non selective	5	9	2	more traditional

Participant ID	Applicant or student	School cluster	Parental higher education	School type	POLAR4 young participation quintile	Index of Multiple Deprivation Decile	No. Traditional attributes	Category
Shannon	Applicant	1	Yes	State funded, non selective	2	1	1	less traditional
Joshua	Applicant	5	Yes	State funded, selective	4	8	2	more traditional
Lucy	Student	5	Yes	State funded, non selective	5	7	2	more traditional
Maria	Student	1	Yes	State funded, non selective	3	5	2	more traditional
Victoria	Student	6	Yes	State funded, selective	5	2	1	less traditional
Georgia	Applicant	2	No	State funded, non selective	2	3	0	non traditional
Geon	Student	2	Yes	Fee paying	5	2	2	more traditional
Rebecca	Applicant	7	No	State funded, non selective	2	3	0	non traditional
Ross	Applicant	1	Yes	State funded, non selective	4	4	2	more traditional
William	Applicant	6	Yes	State funded, non selective	5	9	2	more traditional
Bethany	Applicant	6	Yes	State funded, non selective	4	10	2	more traditional
Amy	Applicant	6	No	State funded, non selective	1	3	0	non traditional
Jordan	Applicant	1	Yes	State funded, non selective	2	4	1	less traditional
Ellie	Applicant	2	No	State funded, selective	3	5	1	less traditional
Mia	Student	4	Yes	Fee paying	Missing*	Missing*	2	more traditional
Nicole	Student	1	No	State funded, non selective	5	10	1	less traditional
Katie	Student	6	Yes	Fee paying	1	1	2	more traditional
Emma	Student	2	Yes	State funded, selective	5	7	2	more traditional
Grace	Student	2	Yes	State funded, non selective	4	6	2	more traditional
Daniel	Applicant	5	No	Fee paying	5	9	2	more traditional
Holly	Applicant	7	Yes	State funded, non selective	5	9	2	more traditional
Omar	Student	4	Yes	State funded, non selective	1	8	1	less traditional
Harry	Student	5	Yes	State funded, non selective	3	7	2	more traditional
Yasmine	Student	3	Yes	State funded, non selective	1	1	1	less traditional

Participant ID	Applicant or student	School cluster	Parental higher education	School type	POLAR4 young participation quintile	Index of Multiple Deprivation Decile	No. Traditional attributes	Category
Abigail	Student	5	No	State funded, selective	3	5	1	less traditional
Layla	Applicant	4	No	State funded, selective	3	4	1	less traditional
Joseph	Student	6	Yes	State funded, non selective	5	8	2	more traditional
Jakub	Applicant	5	Yes	State funded, selective	5	8	2	more traditional
Sarah	Applicant	1	Yes	State funded, non selective	4	6	2	more traditional
Connor	Applicant	1	Yes	State funded, non selective	5	10	2	more traditional
Sofia	Student	7	Yes	State funded, non selective	5	5	2	more traditional
Aliyah	Student	4	Yes	State funded, selective	5	6	2	more traditional
Samuel	Student	5	Yes	Fee paying	4	6	3	traditional
Luke	Student	7	Missing	Fee paying	4	8	2	more traditional
Matthew	Student	3	No	State funded, non selective	1	2	0	non traditional
Nur	Applicant	4	No	State funded, selective	4	4	1	less traditional
Khalil	Applicant	3	No	Missing*	Missing*	Missing*	0	non traditional
Yusuf	Applicant	3	No	State funded, selective	4	3	1	less traditional
Francesca	Applicant	4	No	State funded, selective	4	6	1	less traditional
Amara	Applicant	4	Yes	State funded, non selective	4	5	2	more traditional
Noor	Applicant	6	No	State funded, non selective	2	3	0	non traditional
Lewis	Applicant	6	Yes	State funded, non selective	2	3	1	less traditional
Oliver	Applicant	6	No	State funded, non selective	4	8	1	less traditional
Callum	Applicant	6	Yes	State funded, non selective	5	9	2	more traditional

**There were two participants with some demographic data missing. One because they only completed one side of the form and another because their postcode was not recognised. For these participants the transcripts were scrutinised and they were categorised subjectively from their descriptions.*

Pseudonyms were generated for participants based by looking up the most common names by gender and country of birth in the year the participants were born.

Chapter 6. What applicants want

Participants described a number of priorities for the features they sought in a medical school. In this chapter, I will present these priorities and the interplay between them. At times, participants had to weigh up different priorities and reconcile them within a complex decision-making process, including making compromises and trade-offs. I will discuss the interplay between commonly competing priorities. Participants from different backgrounds tended to display different emphasis on different priorities, and I will conclude the chapter by exploring how these priorities might vary between different social groups. This will be discussed in further depth in Chapter 8 after I have presented participants' perceived resources and constraints, since these also differ by participant social background.

In this chapter, I will use *semi-quantification* to illustrate which medical school features were prioritised by the most applicants. Semi-quantification involves the use of terms such as "majority," "minority," "few," "some," and "many" to provide a sense of the relative prevalence of particular themes or features in the qualitative data. While quantification in qualitative research is often viewed as controversial (195), it can offer useful insights when carefully applied.

Monrouxe & Rees (2019) offer four key rules of thumb for the appropriate use of quantification in qualitative research (174):

1. **Inferences about prevalence should not be drawn beyond qualitative samples**. Therefore, I will avoid making any claims about the broader population based on the qualitative sample used in this study.
2. **Only numbers that relate to features explored across the entire sample should be reported**. This ensures that the comparisons made between different features are meaningful and based on data that was explored with all participants.
3. **Percentages should only be used for larger qualitative samples (n > 50)**. Despite this being a larger qualitative study, I have chosen not to use percentages but rely on terms like "majority" or "minority." However, in Table 6.1, I provide an indication of how I have used these terms in relation to percentages.
4. **Semi-quantification should be used with clear justification**. I will provide justification for the use of terms like "majority" or "few," ensuring that these terms are grounded in the data and reflect a clear trend within the dataset.

By adhering to these guidelines, I aim to strike a balance between qualitative depth and clarity, ensuring that the semi-quantitative results presented are both meaningful and appropriately contextualised. This will enable me to build useful, nuanced theory that can be tested in future research.

This is a larger qualitative study (n=66), which benefits from having a diverse sample of participants. Nevertheless, when I discuss proportions of participants describing different priorities, I do not imply that these proportions can be inferred for the wider population of applicants to medical schools. Rather, I aim to draw comparisons of the importance of different medical school attributes within the sample researched in this study in order to build theory. Furthermore, I seek to compare the extent to which different features are prioritised by participants from different backgrounds. Some features will not have been discussed by all participants, and therefore providing quantification here may appear contrary to Monrouxe & Rees' (2019) second rule of thumb. I argue that the absence of discussion of these features demonstrates the relative lack of importance of them to these participants. If a participant doesn't describe considering the presence of cadaveric dissection as a learning activity, for example, I argue it is reasonable to infer that this was not a high priority for that participant. They may still have preferred cadaveric dissection to other anatomy teaching and learning approaches, but it was unlikely to be a key consideration informing their choice of medical schools.

Table 6.1. Terms used to denote proportion of respondents

Term used	Percentage of participants
Almost all	≥ 95%
Majority	≥ 75% and < 95%
Most	≥ 50% and < 75%
Many	≥ 35% and < 50%
Several	≥ 10% and < 35%
A few	<10%

Through this analysis I constructed seven main themes (Figure 6.1). These were: how far each medical school was from the participants' home (proximity to home), the area in which each school was situated (geographical area), the course and curricular

style offered by each medical school (course), how prestigious each school was perceived to be (prestige), whether participants felt they would fit in at each medical school (fitting in), whether participants liked the perceived culture (medical school culture), and the campus and facilities of each medical school (university resources).

Figure 6.1. Medical school attributes participant described as important consideration.

Individual participants prioritised what they wanted in a medical school in different ways. These seven themes, therefore, were not only given different weighting by different participants, but were also described in qualitatively differently ways. For example, participants varied in the extent to which the geographical area of the medical school was a priority for them, but they also varied in terms of what they considered to be a desirable geographical area, some preferring quiet rural areas while others preferred busy urban areas. I will first present the relative weighting of importance described for these seven attributes by each participant, grouped by socioeconomic background using the categories outlined in Chapter 4. Then I will explore each attribute in depth using the qualitative data in order to elaborate on the nuanced differences between how they were described by different groups.

Table 6.2 displays the relative weighting of priorities by individual participant, organised by socioeconomic categories from non-traditional to traditional. For each participant I identified:

- The medical school attribute that was their top priority (indicated in purple)
- Other attributes that they described as important (indicated in bright blue)
- Attributes they discussed but described as less important (light blue)
- Attributes they either didn't discuss (white with a dash) or discussed but ascribed no importance (white without dash).

This overview demonstrates some clear patterns regarding the relative prioritisation of different medical schools' attributes, including differences by socioeconomic background.

Overall, course style was most frequently described as the top priority by participants and was often a significant priority. However, when viewed by participant category, other higher priorities became apparent for three out of the four groups (all except more traditional). For non-traditional and less traditional participants, proximity to home was typically reported as the highest priority. This was rarely described as a top priority for more traditional and traditional participants, and occasionally explicitly described as not being a consideration in medical school choice by participants in these groups. Both participants in the traditional group described prestige as their top priority, and it was also frequently described as a high priority by participants in the more traditional group; however, prestige was often either not discussed or described as a lower priority for non-traditional and less traditional participants. All but one participant discussed geographical area, but only nine described it as their top priority. It remained a significant priority for many participants from all backgrounds but was more frequently described as the top priority for more traditional participants. Medical school culture was discussed by most participants and was an important consideration for many. There were no clear differences in the extent to which this was prioritised by applicants from different groups. Fitting in, while often not discussed and never described as a top priority, was an important consideration for some participants. It was more often a higher priority amongst less traditional applicants. Finally, university resources were often discussed but rarely a significant priority, and of all the medical school attributes were the least frequently described as a significant priority.

Category	Participant	Individual	School	Area	Proximity	Prestige	Culture	Course	Fitting in	University resources	Geographical area
Non traditional	Ali				•		-	-	-		
	Amir				•				-	-	
	Amy						•			-	
	Emily				•		-		-		
	Georgia					-			-	-	•
	Kamal							•		-	
	Khalil							•	-		
	Matthew				•		-		-		
	Noor					-		•	-		
	Rebecca				•				-		
Less traditional	Abigail			✓				•	-		
	Andrei			✓				•	-	-	
	Ayesha			✓	•			-	-	-	
	Caitlin			✓		-		•	-		
	Charlotte			✓		-	-	•	-	-	
	Ellie			✓	•				-		
	Francesca			✓	•	-	-			-	
	Jack			✓			•				
	James			✓			•		-		
	Layla			✓	•						
	Nicole			✓					-		•
	Nur			✓	•						
	Oliver			✓		•	-			-	
	Yusuf			✓		•		-	-		
	Sophie			✓	•	-			-		
	Emmanuel	✓				-					•
	Jordan	✓						•	-	-	
	Lewis	✓					-	•		-	
	Omar	✓				•					
	Rachel	✓					•				
	Shannon	✓			•	-			-	-	-
	Victoria	✓				•			-		
	Yasmine	✓				-	•		-	-	
More traditional	Ahmed	✓		✓		-				-	•
	Aliyah	✓		✓			-	•		-	
	Bethany	✓		✓				•		-	
	Callum	✓		✓			-	•			
	Chloe	✓		✓		-		•		-	
	Connor	✓		✓			•		-	-	
	Emma	✓		✓		•			-		
	Erin	✓		✓			-	•	-		
	Grace	✓		✓		-		•			
	Harry	✓		✓					-	-	•
	Holly	✓		✓		•			-	-	
	Jakub	✓		✓	-	•			-		
	Jessica	✓		✓			-		-	•	
	Joseph	✓		✓			•		-	-	
	Joshua	✓		✓		•	-				
	Lauren	✓		✓			•				
	Lucy	✓		✓				•	-		
	Maria	✓		✓		•					
	Olivia	✓		✓	•				-		
	Ross	✓		✓				•	-		
	Sarah	✓		✓				•	-		
	Sofia	✓		✓	•						
	Thomas	✓		✓				•			
	William	✓		✓				•	-		
	Daniel		✓	✓			-		-	•	
	Hannah		✓	✓			-		-	-	•
	Luke		✓	✓			-		-		•
	Geon	✓	✓						-	-	•
	Katie	✓	✓			-			-		•
	Mia	✓	✓			•					
Traditional	Megan	✓	✓	✓		•			-		
	Samuel	✓	✓	✓	-	•			-		

Table 6.2. Overview of participants' priorities when considering medical schools.

6.1 Course

Participants often expressed preferences for the course style they wanted and features within curricula that they found desirable. They described varying preferences: the use (or not) of problem-based learning (PBL), early clinical experience, the size of the cohort, cadaveric dissection, and the opportunities to undertake additional degrees. These are each described below, with indicative quotes presented.

The two equally most frequently discussed course features were whether the curriculum employed problem-based learning or not, and whether there was early clinical experience. Many participants described PBL curricula as more desirable than lecture-based courses. These participants described finding small group work, the opportunity to develop independent learning skills, and the avoidance of lectures as appealing features of PBL. Chloe described PBL as her first priority when choosing medical schools. She felt that she learned better in small group settings. While she describes this as a feature of PBL, she also implies that medical schools that employ PBL will have a greater emphasis on learning in small groups in other aspects of their curricula.

> *"Well I think I always kind of knew I wanted to try PBL obviously I didn't know entirely what it entailed but I think it sounded more suited to me rather than lectures. […] the focus on mainly small group learning, so like the [teaching sessions] in clinical skills, it's all small group based and I find that I learn better like bouncing off other people. So that's why I thought that would be better than lectures."*
>
> (Chloe, more traditional medical student at a cluster 2 medical school)

Conversely, several participants described preferring 'traditional' or lecture-based courses. For some this appeared to be out of scepticism regarding PBL rather than a stated desire for lectures. These concerns were driven by a fear of making mistakes, not knowing how much depth to learn, and peers 'messing up' and jeopardising their learning. Maria described avoiding applying to medical schools with PBL curricula as she felt she wouldn't know how much depth to study different topics in. There are similarities with how Nicole describes her perception of PBL. Both excerpts highlight two features that pervaded discussion of PBL curricula. Firstly, that impressions of

PBL are formulated based on word of mouth. This is because PBL is a pedagogical approach with which most secondary school students are not familiar. Misconceptions regarding the principles of PBL were, therefore, abundant. Secondly, as a consequence of these misconceptions, students described their perceptions of PBL as posing risks regarding whether they would learn the right content and in the right depth. They did not appear to appreciate the input faculty facilitators have in the process.

> *"One thing that I didn't like that quite a few universities have started bringing in is PBL. Mainly because I've heard quite bad reviews about PBL. And I didn't really like the concept of it because I'm not very good at knowing when to stop so to speak, when it comes to learning. Because I could also take my interest in a given topic and stretch it out really far. But then I could also go into too much detail into something when it's not required."*
> (Maria, more traditional medical student at a cluster 1 medical school)

> *"I think the main thing that put me off was the stories people told me about their learning style in classes, because for a while they were doing 100% - I think it's called Problem Based Learning. Someone described it to me as paying £9,000 a year to look things up on Wikipedia […] So that kind of put me off straight away"*
> (Nicole, less traditional medical student at a cluster 1 medical school)

The inclusion of clinical placements within the early years of the course, or 'early clinical experience' received as much attention from participants. Discussion of early clinical experience was, however, much more one sided. Participants overwhelmingly described early clinical experience as a positive, with only a few describing a preference for a distinct preclinical – clinical divide in the curriculum. Those who sought medical schools with early clinical experience described three main advantages to this: they felt clinical placements would help contextualise their learning, provide an opportunity to develop important clinical skills such as communication and professionalism, and they would be enjoyable and provide variety of learning approaches. Caitlin described the importance of early and sustained

experience in developing clinical skills. Ultimately, she thought this would make her a better doctor.

For the few that preferred not to have early clinical experience, this appeared to be borne out of anxiety regarding being underprepared for clinical placements if they hadn't first learned the basic science, as illustrated in the excerpt from Georgia's interview. All of the participants who described wanting a preclinical phase at medical school also described negative views regarding PBL. However, the inverse was not true. There were examples of applicants wanting a lecture-based course (as opposed to PBL) but also wanting early clinical experience.

> *"I feel like if you have early patient contact you're more able to build on... Because medicine is not just your sort of scientific knowledge, it's how you deal with patients. And if you have that contact early on then when you officially become a doctor you'll be able to form more of a relationship with… a better relationship with your patients until you have clinical experience later on. I think you'd have a shorter time to be able to build on those skills."*
> (Caitlin, less traditional applicant to a cluster 5 medical school)

> *"I also like the lecture style of the teaching. So doing the three years pre-clinical and learning all the science and everything and then meeting the patients afterwards, like it gives me a bit more confidence that I'll be doing the right thing."*
> (Georgia, non-traditional applicant to a cluster 2 medical school)

Many participants discussed their preference for cohort size, the majority stating a preference for a smaller cohort. They described medical schools with smaller cohorts as friendly, and that they would feel more comfortable there. They also anticipated that smaller medical schools would be able to provide more support and more interaction with teachers. For the few participants that described wanting a bigger university, this was because they considered bigger medical schools to be more prestigious.

> *"So like the small course and I think that's why I really liked [university] as well in that it has a really small course, and everyone knows everyone."*
> (Olivia, more traditional medical student at a cluster 7 medical school)

"Stereotypically where you've got bigger schools you're not able to get such a personal relationship. And you're not able to sit there and go I really, really don't get this, would you mind just going through it with me for the third time?"
(Ellie, less traditional applicant to a cluster 2 medical school)

Many participants discussed preferences for how they wated to learn anatomy, in particular. The majority of these described seeking medical schools which included cadaveric dissection as a learning approach within their curricula. When probed, several participants did not describe why they felt it was important. Those that did described three main reasons. Firstly, most thought it was a good way of learning because it was more hands on, more realistic, and it would prepare them for seeing dead bodies later in their careers. Secondly, several wanted to study somewhere with dissection as they described that most UK medical schools don't anymore, and they didn't want to miss out on this. Thirdly, several aspired to surgical careers and felt that dissection experience would be important. A few participants stated they would rather not participate in dissection as they were concerned about a risk of 'messing it up' (Georgia, non-traditional applicant to a cluster 2 medical school) and this jeopardising their learning.

"I just prefer the hands-on approach of being able to physically see where things are. Whereas if they take it out Blue Peter style, like here's one I cut out earlier, then you'd have more time to learn about, but I think there's something that can be learned about it which is possibly more valuable by actually locating it yourself."
(William, more traditional applicant to a cluster 6 medical school)

Joseph: So the reason I was attracted to this medical school is they have full body dissection, so they have a dedicated anatomy facility that helps you to learn the body in its normality.

Interviewer: And why is that important?

Joseph: To be honest I don't know actually. A lot of people, because you don't really know until you've been in something how it actually works, and nobody goes to two medical schools because you can't go to two medical schools. So that's a good question, it's what a lot of people have debated, but there are other schools that don't do it, so I don't know really.

(Joseph, more traditional medical student at a cluster 6 medical school)

The opportunity to do extra degrees such as intercalated degrees or MBPhD programmes was also a consideration for several participants. The majority of participants that discussed intercalated degrees were attracted to the opportunities as they described an interest in research and considering academic careers. A few were put off medical schools in which there was a compulsory intercalated degree, feeling that it should be optional. Those put off either wanted to concentrate on clinical medicine or were concerned about the extra year of fees.

"I liked that they put quite an emphasis on intercalation. I know quite a lot of people do the six year programme and I thought that was really interesting and that was definitely something that I wanted to do regardless of where I went."
(Lucy, more traditional medical student at a cluster 5 medical school)

"It's an extra year because you have to do the intercalation so that's obviously an extra year of the fees and things like that."
(Lauren, more traditional applicant to a cluster 7 medical school)

Some participants did describe ruling out medical schools based on course style; typically this was based on preferences for or against PBL. Other course features (for example cadaveric dissection) appeared to be considered as desirable rather than essential when shortlisting medical schools. Furthermore, although participants often stated a preference for an ideal course style, when asked which schools they had chosen, these often had different course styles to the course style they had expressed a desire for (for example they described wanting a PBL school but chose schools with traditional curricula), or the four medical schools they said they had chosen had different course styles. This suggests that participants were prioritising other features more highly.

6.2 Proximity to home

Proximity to home was discussed by almost all participants. In the majority of cases they expressed a preference for attending a medical school close to their parental home. They provided various reasons for this, including minimising cost, family support, and being close enough to travel home (including for family emergencies).

All of the participants that described wanting (or needing) to live at home were from non-traditional or less traditional groups and finances were usually reported to be the main driver for this.

> *"How much it would cost to get from there to home all the time."*
> (Matthew, non-traditional medical student at a cluster 3 medical school)

> *"My only support system is my family so if I'm far away up the country it's not going to quite work."*
> (Emily, non-traditional applicant to a cluster 3 medical school)

In addition to having varying preferences regarding proximity to home, participants described distance differently. For some 'close to home' meant within three-hours-hours' drive, while others felt having to commute across London was a significant distance.

While distance was a consideration for the majority of participants, it was described as a higher priority by those from non-traditional and less traditional backgrounds. For some being close to home was desirable, but they would forego this in order to prioritise other features of medical schools, however several participants prioritised distance from home above all else and only considered the four most proximal schools. None of these described considering the implications this might have on their likelihood of getting an offer. Typically, this was because they planned on living at their parental home for some or all of their time at university.

Several other participants described wanting to move further away from home in pursuit of 'the university experience' where they wanted independence and to experience a new geographical area. Callum illustrates the tensions that were prevalent in discussions of the ideal distance from home; balancing the benefits of having independence and the university experience with the cost implications of rented accommodation, and in some other accounts the significant cost and time burden of travel.

> *"I always have wanted to study somewhere else because of the fact that it gives me that experience of being able to live independently in my own."*
> (Rebecca, non-traditional applicant to a cluster 7 medical school)

“Actually I'm not entirely sure whether it’s a positive or a negative, because obviously it's a bit of both. Because I do want to travel. I want to go somewhere and live on my own and whatever else. But at the same time I recognise it's going to save me a lot of money in the long run being able to live at home, it just won’t let me foster that independence.”

(Callum, more traditional applicant to a cluster 6 medical school)

A few participants discussed feeling pressure to move away for university, which was perceived as the societal norm. For example, Jack described how he wanted to stay close to home so that he could live with his parents to avoid the cost of rented accommodation but felt pressure from teachers and peers to apply to more distant schools so that he could have the ‘uni experience’. He was the first in his family to study at university and this pressure led to him having a fear of missing out the full university experience. He successfully applied to his nearest school (and more distant schools) but compromised by living in university halls for the first year for the experience. His parents rented out his bedroom in the family home and Jack got a part time bar job in order to pay for the accommodation fees. He described this as a real challenge when trying to balance the academic demands of the course. He subsequently left his job and plans on returning to his parental home for the rest of the course.

“I felt that I would be a bit, almost judged for not moving away far enough. Like I wasn't properly fitting this uni experience that everyone goes on about and that my family hadn’t really had.”

(Jack, less traditional medical student at a cluster 6 medical school)

6.3 Geographical area

Similar to distance from home, the geographical area that the medical school was in was an important consideration for most participants. There were three key factors that were typically described with regards to the geographical area, and preferences for these were not uniform. Firstly, many participants described considering potential leisure activities within the area. Where big cities were preferred, this was typically because they were perceived as having more to do and being better for socialising. Bethany illustrates how she considered this important in order to maintain a work life balance with the demands of a medical course.

"There's loads of different things that I'll be able to do in my spare time, not that I will have that much spare time, but to ensure that I'm enriched and I'm not just focusing on my studies all the time."
(Bethany, more traditional applicant to a cluster 6 medical school)

Secondly, many participants considered the cost of living in different geographical areas. Large cities and southern cities were perceived to incur higher living expenses, with London being described as an extreme example. As a corollary, several participants immediately ruled out applying to medical schools in London as they felt they wouldn't be able to afford to live there. Omar describes how his mother counselled him not to apply to London based medical schools. This excerpt illustrates a thought process described by a few participants, whereby they recognised that London students were eligible for a larger student loan to assist with the higher cost of living, but were put off by the prospect of accumulating more debt.

"That put me off it, obviously because it's in London it's more expensive. So my mom was saying, why are you bothering to go to [university] when you could just get a different university where it's cheaper? […] She was like, oh you're just going to be in more debt. Because obviously, for accommodation you take a higher loan. Obviously other things are more expensive here."
(Omar, less traditional medical student at a cluster 4 medical school)

Thirdly, several participants described whether they wanted to attend a university in an area they were familiar with, or whether they wanted to experience a new location. Those that wanted to study somewhere familiar were typically those that expressed concern about the safety of cities, whereas those that wanted to experience a new area were motivated by the 'university experience' (as discussed above).

Erin: The only thing that would put me off is I know they have a reputation for being quite dodgy, but…

Interviewer: What do you mean?

Erin: Like, there's not the best of people that live there. They're quite aggressive […] in the city.
(Erin, more traditional applicant to a cluster 1 medical school)

"London, because I've always... Like this has been my home, and I don't think I'd be able to live in a smaller city"

(Layla, less traditional applicant to a cluster 4 medical school)

Consideration of these three factors often led to preferences for living in smaller or larger urban areas. Differences were seen in the relative emphasis that was placed on each. Those from non-traditional and less traditional backgrounds generally appeared to be more cognisant of living expenses and described being prepared to forego other features of the geographical area (i.e. things to do) in order to minimise cost of living.

6.4 Prestige

Prestige was discussed by the majority of participants. Their accounts revealed that individuals vary both in how they define and interpret prestige and the value in which they hold it. I will first address how prestige was defined before turning to how it was, or was not, valued and prioritised. The ways in which participants described prestige revealed that their definitions were complex and multifaceted. There were six distinct ways in which participants described prestige. Individual participants would often describe using one or more of these to form an image of how prestigious individual medical schools were.

First and foremost was reputation; this was the most frequently described indicator of prestige. Participants considered reputation in terms of if they had previously heard of the university and how others (teachers, parents, people they encountered on work experience) described the university. This also included participants becoming aware of medical schools with reputations for producing graduates well prepared for clinical practice through encounters on clinical work experience. The extent to which a medical school was perceived as 'established' also contributed to how reputable the medical school was perceived to be. Applicants were less likely to be aware of newer medical school and would not have encountered graduates of the most recently established medical schools. Consequently, new medical schools were often seen as being less prestigious.

"I would say they probably have a reputation that is more based on sort of the tradition that people expect that they're the best, because they've been around the longest."

(Nicole, less traditional medical student at a cluster 1 medical school)

"For jobs and stuff, if it's a new medical school, they might not take you as seriously as they would if you went to a red brick or something like that."
(Holly, more traditional applicant to a cluster 7 medical school)

Secondly, most participants described using university rankings and league tables as markers of prestige. They used a variety of different league tables, including general university rankings and medicine course specific rankings. Participants were occasionally reticent to disclose that they had used league tables to inform their choices. This may be because they perceive this to be a socially undesirable approach to medical school choice. Ross, for example, 'admits' to using the Guardian ranking table. His use of 'brutally honest' suggests he may be embarrassed or think that rankings are not perceived to be as meaningful by others. Another explanation for this is seen in the accounts of other participants, including Joseph, who question the validity of league tables.

"I'm going to be brutally honest here. I used the Guardian rankings table for medicine. And at some point I have to completely admit that that influenced some of the choices that I made."
(Ross, more traditional applicant to a cluster 1 medical school)

"I wasn't sure how much to trust the rankings. I'm not sure whether the rankings are a direct correlation with how much you enjoy medical school or whether you become a good doctor."
(Joseph, more traditional medical student at a cluster 6 medical school)

Thirdly, several participants considered the research the university was engaged in and the teaching hospitals that were associated with the medical school. Those that described medical schools' research felt that lecturers that were engaged in research were more likely to know more about their field and provide better education. Those who considered association with renowned teaching hospitals or centres of excellence for particular specialities as prestigious were attracted to the opportunity for workplace learning in these settings.

"It's a research intense university. So the lecturers will normally be very passionate about their subject and aware about the field."
(Lewis, less traditional applicant to a cluster 6 medical school)

"They felt more prestigious, so I think it was that kind of, oh I have the opportunity to be at [teaching hospital]… So I think I got kind of swept up in that"

(Emma, more traditional medical student at a cluster 2 medical school)

"A big centre of excellence, I think, as a place to learn would be really excellent."

(Connor, more traditional applicant to a cluster 1 medical school)

Finally, membership of the Russell Group of Universities (a group of 24 research-intensive universities in the UK (Russell Group, n.d.). was often used to distinguish more prestigious from less prestigious medical schools. As a binary construct, this provided an easy way for several participant to immediately identify if a university was prestigious or not.

Megan describes how her mum's input influenced her perception of universities' prestige. She had not wanted to apply to any medical schools in London as she "hated that it was so close". She wanted to study further away from home, and ultimately ended up doing so, but did apply to one London medical school as she felt these had a good reputation. She goes on to describe how she only considered Russell Group universities, attributing this decision to her parent's background (both her parents were doctors).

"My mum thought at the beginning that it was good to get – my mum was quite like, involved. She thought that going to a London uni would be good and she thought like they were the respected ones. So I had the list of the […] medical schools and this is because of kind of my parents' background and like their thinking they wanted me to go to Russell Group. So then we crossed off all the non Russell groups

(Megan, traditional medical student at a cluster 3 medical school)

"I feel like I've always been told growing up, always apply to Russell Group universities."

(Layla, less traditional applicant to a cluster 4 medical school)

Those that described prestige as a high priority described three main reasons for this. Firstly, several participants felt that attending a prestigious university would improve their job prospects after graduation.

"If you're an Oxbridge applicant, you got in you'd be hired basically."
(Joshua, more traditional applicant to a cluster 5 medical school)

"I thought that it would make it easier for me perhaps after graduation to get a job or that it would make me feel more successful, I guess."
(Victoria, less traditional medical student at a cluster 6 medical school)

Secondly, because they felt that the most prestigious medical schools were the best and they wanted to achieve the most they could, describing wanting to go to a medical school they could be proud of, and that would impress their peers. Thirdly was because they felt that the most prestigious schools would offer the best quality of teaching.

"I think it's… I think I'd like it to be a good school, like recognised as a good school, because… I don't know. I wouldn't want to go through all that hard work just for people to think that, because it's from a bad school, it's not worth as much and stuff like that."
(Holly, more traditional applicant to a cluster 7 medical school)

"I don't want to say it's mostly about showing off but that also plays a part. Because when you say you go to [university A] or you go to [university B], people's reactions go like, oh nice, that's a great university."
(Omar, less traditional medical student at a cluster 4 medical school)

On the contrary, those that described prestige as a lesser priority, or of little concern, stated they felt that the medical school they attended would not significantly influence their future career prospects in the same way that it might for other disciplines, perhaps because medicine is a prestigious degree in and of itself. Others suggested that indicators of prestige didn't necessarily reflect quality of teaching, or that the

quality of teaching would be good at all medical schools regardless of their prestigiousness.

> *"It didn't make a huge difference in where you go. You are all coming out with the same degree."*
> (Jack, less traditional medical student at a cluster 6 medical school)

> *"I'm not looking at any of the charts because I feel it's one of those degrees where that doesn't matter that much. […] I felt like since you essentially get employed as soon as you come out it doesn't matter how high ranked a medical school is, you're going to get employed at the end."*
> (William, more traditional applicant to a cluster 6 medical school)

> *"Despite wanting to go to a prestigious place, I'd already been at [University] which, frankly, in experience, for my course anyway, was not very good at teaching. So I did, at the same time, realise that just it's because it's a prestigious place, does not equal good teaching. Medicine's a little bit different to that."*
> (Samuel, traditional medical student at a cluster 5 medical school)

Some participants described prestige as being important at the start of their application when they had little else to consider. As they learned more about different medical schools, prestige became less important as other priorities emerged.

6.5 Medical school culture

The majority of participants discussed their perceptions of the culture at different medical schools, acting as a significant consideration for most. They described three key features of a medical school's culture: the school's values, the feel, and the levels of student support. Participants described perceiving different medical schools to have different ethos and values. These were perceived to be reflected in the school's admissions procedures, and were used by participants to consider whether the school's values were aligned with their own. Several participants described experiences on open days, interviews, or offer holder days that put them off medical schools and resulted in them either not applying or not accepting offers from these medical schools. Emma described how her experience of visiting one medical school not only discouraged her from applying to that medical school, but made her

reconsider applying for medicine. She later attended other medical schools' open days and realised she was put off the university, rather than medicine as a discipline.

> *"There was something about the way they pointed out the fact that they didn't need you. It was very clear that they wanted the best, and that if you weren't that then that was your problem, not theirs. And really, really disheartened, I'd been set on medicine, and I came away and I ended up going to a load of chemistry talks that day […] Whereas when I went then to open days at [university] and [university] as well, they were very much about, we want you to like being here, you're going to be here for five years, we want the right people. And they gave me the kind of idea that if I'm rejected from somewhere, it's because I'm not the right fit and that's okay."*
>
> (Emma, more traditional medical student at a cluster 2 medical school)

It is interesting to observe in this excerpt, and in other participants' accounts, the tension between prestige and values. Prestigious medical schools were often seen to value academic excellence over other applicant attributes. For several participants, this deterred them from applying there. Emmanuel described how he wanted to apply for a medical school that valued attributes more aligned to the NHS constitution.

> *"Then, what the medical school was looking for, because that reflects the students that they would take on. So, [university] focused on having students that communicate well and have empathy and basically all the seven parts of the NHS."*
>
> (Emmanuel, less traditional medical student at a cluster 3 medical school)

Whereas values were considered to be based on the school and the staff employed by the school, participants also described the 'feel' of different medical schools. Here they referred to the student community that would be their peers. Most participants described wanting to go to a school where they liked the 'feel' or 'vibe'. As earlier described, this was one of the attractions for courses with a smaller cohort, as participants felt it would feel like more of a 'community' or 'family'. One factor that contributed to the 'feel' of the medical school was how competitive participants perceived it to be. Participants described thinking that more prestigious medical

schools might have more of a competitive atmosphere amongst the student body. For this reason, some would forego prestige in order to feel more comfortable in the school.

> *"it seemed highly competitive and highly… It was pretty much… I felt like I'd have to fight for my life there, just elbows and kicking and […] so I'd have to struggle… I don't know. It's sort of more highly regarded, I think, so I'd kind of built up a mindset that I'd have to struggle to kind of amount to anything, if you know what I mean. [… at another university] everyone else seemed more friendly and more approachable, so I think that was a big factor in it."*
>
> (Andrei, less traditional medical student at a cluster 2 medical school)

The third aspect of culture was how supportive the medical school was considered to be. Some participants reported expecting medical school to be difficult and anticipating challenges with their studies. This desire for a supportive and nurturing school was particularly prevalent amongst the accounts of participants from non and less traditional backgrounds.

> *"The support that I'd get. That's the important thing. It's all about support if I'm honest, like. The opportunities they give you, how far they push you, how much they help you get it, and how like, if they care for you enough to help you like have the opportunities."*
>
> (Ayesha, less traditional applicant to a cluster 4 medical school)

> *"A perfect medical school was one that was going to be supportive, it was going to be a supportive learning environment that was conducive to learning, So, that was one of the things, but I'm going to be doing a very, very difficult degree, and I want to make sure that my academic staff are looking after me, rather than on my back, and that's what I got from this university."*
>
> (James, less traditional medical student at a cluster 3 medical school)

In addition to their perceived values and feel of individual medical schools, participants reported using satisfaction rankings as a measure of the culture at different medical schools.

6.6 Fitting in

The majority of participants discussed wanting to 'fit in' at medical school. They described wanting to go to a medical school where there were people like them or a place that valued difference.

> *"The perfect medical school would be inclusive. Not just of boys and girls and the different genders but also just people from around the world and ethnicities. And even people of different classes."*
>
> (Maria, more traditional medical student at a cluster 1 medical school)

Most participants describe wanting to attend a medical school where they would fit in socially. This varied depending on what they liked to do to socialise. Some wanted to attend a university that had a reputation for being sociable, or one that they thought would have a good nightlife. Others wanted to go somewhere where socialising might not revolve as much around drinking and parties. Socialising wasn't a high priority for all participants. Indeed, even those that did consider these features of the university, described them of being of relatively little importance to them compared to other features.

> *"I normally just ask like the student ambassador, is the cohort like really extroverted, is it quite like heavily about drinking and partying or are they quite shy, like introverted types, and I just ask questions like that and I think you get quite a good snapshot of what they are like."*
>
> (Geon, more traditional medical student at a cluster 2 medical school)

> *"The fact that it was always advertised as having a big night life. I always thought, is everyone going to be out being ridiculous? But that was the only thing that put me off."*
>
> (Katie, more traditional medical student at a cluster 6 medical school)

Several participants described wanting to go to a medical school where they thought there would be students with socioeconomic backgrounds like theirs. Typically, this was with regards to school type: some participants from state funded schools

described not wanting to go to medical schools where they thought the majority of students would have been privately educated. As illustrated in the quote from Bethany, the socioeconomic class of students at a university was perceived to influence the feel (described above) with regards to levels of competition.

"But I've got a friend who got into [University] in London, he's been to the exact same nursery, primary, and secondary and then college with me. And out of all his flat, I think he's the only one who went to a state comprehensive. And I think they call him 'Compy' or something like that."
(Jack, less traditional medical student at a cluster 6 medical school)

"I think having people from different educational backgrounds might make it nicer to be there. Because I think people from private schools are often quite competitive and they've been taught to be that way by their school. And competition is good, but it can be quite nasty."
(Bethany, more traditional applicant to a cluster 6 medical school)

Several students from black and minority ethnic backgrounds discussed wanting to fit in with regards to ethnicity. While some described feeling that particular medical schools were more diverse, and this was desirable for them, participants more frequently described accounts of feeling like they wouldn't fit in at certain schools due to a lack of ethnic diversity. Perceptions of diversity were generally based on marketing materials and their experiences on open days, visit days, and work experience as teaching hospitals associated with medical schools. Maria and Francesca both told accounts of how they attended open days and work experience, respectively, and found themselves to be the only black people in these environments

"At the same time, Leicester was really ethnically diverse, so there was a lot of diversity in Leicester, a lot of different people and at the same time also the societies were quite nice."
(Emmanuel, less traditional medical student at a cluster 3 medical school)

"Just for the open day in general, when I got there, there were no other black people who were in the congregation. And they had two open days but on that day, I would say there were at least 150

people. Although there were other people from ethnic minorities, I just questioned if I would feel a sense of belonging there."
(Maria, more traditional medical student at a cluster 1 medical school)

"There were just no black females. Barely any people who were black, which was just like… It would be a bit hard, I feel like I wouldn't fit in."
(Francesca, less traditional applicant to a cluster 4 medical school)

6.7 University resources

Most participants discussed universities' resources. These were in terms of the campus and buildings, medical schools' facilities, and the student accommodation available. The quality of the universities' campuses and buildings was a particular consideration for students that wanted to attend campus-based universities, and participants were often impressed by medical schools that had new buildings.

"I like their campus. I think they have a lot of modern, new buildings, which I found really exciting, and I thought it was quite a pretty campus."
(Mia, more traditional medical student at a cluster 4 medical school)

Student accommodation was discussed by several participants. This related to cost, perceived quality, and distance from teaching buildings of the student halls. A few participants from non and less traditional backgrounds decided against particular schools based on the cost of the student accommodation. In these instances, they did not discuss considering the cost of accommodation after the first year, when students typically move off campus.

"[Student halls] were all either self-catered or too far from the campus, so they were either expensive or too far."
(Caitlin, less traditional applicant to a cluster 5 medical school)

"The accommodation's kind of affordable, because if I'd went to Edinburgh I would've had to stay at home because it's too expensive."

(Nicole, less traditional medical student at a cluster 1 medical school)

6.8 Complex decision making

The preceding themes have all been features of medical schools that participants desired. If they could design their perfect medical school, it would be a combination of their preferences in each of these attributes. Many participants recognised, however, that not only might *their* perfect medical school not exist, but the medical schools that combined all the attributes that they desired might also be desirable to other applicants and thus may be more competitive to get in to. For some, maximising chances of getting in was the first priority, and so they were prepared to forego other desirable medical school attributes.

"I wanted to have the best sort of possibility or the highest chance of getting into medical school."
(Ahmed, more traditional applicant to a cluster 5 medical school)

"I think at that time I was more concerned about getting in rather than choosing the school I could get into."
(Kamal, non-traditional medical student at a cluster 4 medical school)

"I was somewhat in the ethos of I want to do medicine. My ultimate objective is to be a doctor, where I go is a second thought."
(Thomas, more traditional medical student at a cluster 6 medical school)

"I didn't really have a choice, I get asked this quite a lot, but I didn't really have a choice. I went in with the mindset that I want to learn medicine, I want to be a doctor, I don't care where I end up as long as I get my degree."
(Olivia, more traditional medical student at a cluster 7 medical school)

The extent to which applicants prioritised getting in and were willing to forego other priorities depended on their perceived resources and constraints. These will be discussed in further depth in Chapter 7.

6.9 Discussion

These data demonstrate that the features that applicants desire in medical schools vary and are influenced by socioeconomic background. This is likely to contribute to the differences in proportions of applicants from different backgrounds applying to different medical schools, and ultimately in their differential success.

When considered by socioeconomic group, course style remained the highest priority for all groups. Proximity to home was described as the top priority for non-traditional and less traditional groups, and prestige was the top priority for more traditional and traditional groups. Further, the interpretation of each of these factors was subjective. For some being close to home meant applying to the nearest four schools in order to be able to live at home, for others 'close' was within a few hours commute.

Similarly, prestige was defined and interpreted differently by different participants. Prestige was almost always described positively, but for some was described as a luxury rather than a priority. This may be because they believe they have to prioritise other factors due to constraints they may face. Alternatively, it may be that as medicine is a highly prestigious degree in and of itself and therefore the prestige of the institution becomes less important.

Some of the individual priorities identified in this chapter have been reported previously in the literature. Within the UK, there have been several studies describing applicants' top priorities. In their study of applicants to five British medical schools in 1990, McManus *et al.* identified geographical location to be the most significant factor (81). Entrants to Liverpool Medical School between 1996 and 2001 reported their top reasons for selecting Liverpool as liking the city, wanting an integrated PBL course, liking the interview procedure, and the reputation for social life (79). Entrants to St Mary's Hospital Medical School in London (now part of the Imperial College London) between 1971 and 1996 reported friendliness as being the main appeal (78). In other international contexts, different features appear to be more important; the selection procedure in the Netherlands (83) and reputation in the United States (82). I found that many of these features remain important considerations for modern UK applicants. The novel finding from this study, however, is that applicants from different background both define these features, and prioritise them, differently.

Each of the above studies has focused on identifying applicants' top priority. While there are certainly features that are more important than others, choice is a complex phenomenon and reasons for choosing medical schools are likely to be multifaceted.

Considering only the main feature attracting applicants to a school is therefore likely to be too reductionist an approach to enable us to fully understand how applicants choose. Understanding the complexities of this process is best achieved through in-depth qualitative accounts from applicants. One such study of applicants to UK medical schools in 2003 identified three key themes that influenced their choices: academics, location, and 'intangibles' (8). This study corroborates the importance of academic factors (including predominantly prestige), geography, and 'intangibles'. I have further identified how some of these priorities vary between applicant groups and how this is influenced by their characteristics. Through doing so I have been able to elaborate on some of the 'intangibles' identified in Brown's study to find that some of this is driven by a desire to fit in.

Furthermore, applicants are not homogenous. What is important to one applicant may be trivial to another. I have demonstrated that there are differences between applicants of different socioeconomic groups. While there has been little exploration of how priorities differ by social background amongst medical applicants, two studies have identified some differences. Firstly, in the Netherlands, first generation students are less likely to choose medical schools based on the curricula they offer compared to those with familial experience of higher education (83). Secondly, in the USA, Black and Minority Ethnic applicants reported the diversity of the student body and the diversity of the faculty as more positive reasons for choosing medical schools (82). This corroborates my finding of applicants being concerned about wanting to fit in at medical school. A study of the websites of all UK medical schools identified that BME people were underrepresented in the photographs displayed compared to the UK population (196). This is likely to perpetuate the feeling that they may not fit in. While socioeconomic class is less immediately apparent, one could hypothesise that university websites may contain photos and videos of subtly more traditional students.

Research in the wider discipline of higher education has identified that applicants from lower socioeconomic backgrounds make substantially different choices (7). Most significantly they apply to and attend less prestigious universities given their grades, a phenomenon known as 'undermatch' (197).

In their study of applicants to UK higher education, Reay *et al.* identified that for applicants from working class backgrounds distance was the most substantial priority. They describe how many working class applicants were only considering universities that were geographically proximal, and less than a quarter intended on leaving their parental home during their higher education studies (198).

This poses unique challenges to medical applicants for two main reasons. Firstly, only a minority of higher education providers in the UK offer medical degrees (46 out of 271). This means that depending on where you live your local university may not offer the option to study medicine. Secondly, and arguably a more significant challenge, is the differential rate of acceptance as outlined in Chapter 2 different medical schools have vastly different competition ratios. Therefore, by prioritising distance when choosing medical schools one might apply to four of the more competitive schools and reduce their likelihood of receiving an offer.

Conclusion

This chapter has presented the first analysis of this thesis, examining the medical school attributes participants found desirable and how they prioritised these attributes when selecting to which schools to apply. Notable differences were found between socioeconomic groups. The next chapter will offer a subsequent analysis of how participants described their resources and constraints, aiming to shed light on the differences between socioeconomic groups and how these differences may influence their varying priorities.

Chapter 7. Resources and constraints

This chapter reports the findings of a subsequent analysis of the qualitative interview data, using a theory informed inductive approach (199). In this analysis I have drawn on the forms of capital described by Luthans, Luthans and Luthans (176) as a theoretical framework (176)to examine participants' perceived resources and constraints, and how these were related to their socioeconomic backgrounds.

As alluded to in **Error! Reference source not found.**, while applicants may have clear preferences regarding medical schools they would prefer to study at, they may not necessarily apply to these schools. Medical schools have different admissions criteria and competition ratios. Consequently, when making application choices, applicants must weigh up their priorities with the perceived likelihood of their being successful in obtaining an offer (and indeed in meeting this offer). This chapter explores how applicants evaluate their strengths in order to make a judgement about how competitive they are as applicants and therefore their likelihood of being successful at applying to different medical schools.

Luthans *et al.* describe a framework consisting of four forms of capital (176). Three of these are similar to those first described by Bourdieu (1986): economic capital, cultural capital, and social capital (175). Luthans *et al.* add a fourth form of capital 'positive psychological capital' encompassing four capacities: confidence, hope, optimism, and resilience (176). They argue that who you are is as important as what you have, what you know, and who you know. Their framework is presented in Figure 7.1.

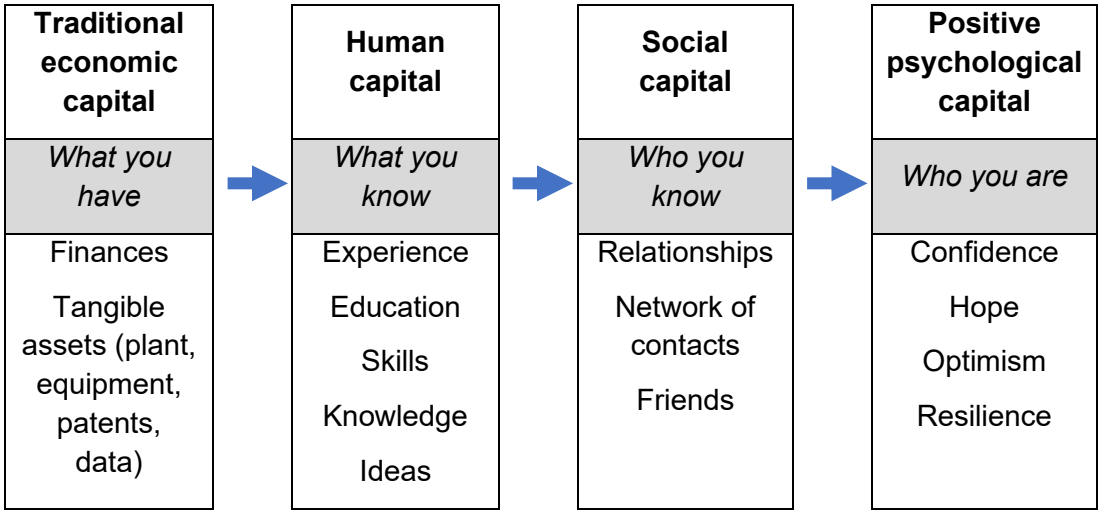

Figure 7.1. Forms of capital adapted from Luthans, Luthans & Luthans, (176)

Economic capital can be defined as that which is 'immediately and directly convertible into money' (175). Social capital was defined by Bourdieu as 'the aggregate of the actual or potential resources which are linked to possession of a durable network or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership of a group' (175). Social capital, therefore, refers not only to the capital held through having contacts, but also to those of being part of groups. Membership of these groups can provide capital both through the contacts that they provide, but also through being identified as a member of such a group. Akin to Bourdieu's cultural capital, intellectual or human capital refers to the knowledge and skills that individuals possess. Positive psychological capital consists of four elements: efficacy, hope, optimism, and resilience (177). The definitions for each of these attributes are provided in Table 7.1.

Table 7.1. Features of positive psychological capital as defined by Luthans & Youssef (177)

Attribute	Definition
Efficacy	Believing in one's ability to mobilise cognitive resources to obtain specific outcomes.
Hope	Having the willpower and pathways to attain one's goals
Optimism	Having the explanatory style that attributes positive events to internal, permanent, and pervasive causes.
Resilience	Having the capacity to bounce back from adversity, failure or even seeming overwhelming positive changes.

After an initial inductive analysis (see Chapter 4), I adopted the forms of capital described by Luthans et al. (176) as a theoretical framework. To conduct this analysis, I reread the transcripts to identify how participants described different forms of capital. I then identified specific subtypes for each of the four forms of capital and created a framework matrix encompassing these subtypes. Next, I revisited each participant's transcript to note what, if anything, they had mentioned regarding each subtype of capital.

To facilitate cross-case comparisons by socioeconomic group, I documented what each participant had said about each subtype of capital, assigning their statements to one of four categories:

i. Described as a resource - something perceived as a strength within their application or something increasing their likelihood of acceptance to medical school.

ii. Described as a constraint - something perceived as making acceptance to medical school harder or less likely.

iii. Discussed but not explicitly described as a resource or a constraint - mentioned in the transcript but not clearly framed as helpful or limiting.

iv. Not discussed - no mention of this subtype within the transcript.

I avoided providing my own interpretation of whether what participants described was a resource or a constraint, classifying only according to their explicit descriptions. This chapter presents both the relative frequencies with which participants from different socioeconomic groups described each form of capital as a resource or constraint, as well as qualitative explanations of why and how they perceived these forms of capital in that way, and how these perceptions varied by socioeconomic backgrounds.

7.1 Overview of resources and constraints

Figure 7.2 illustrated the forms of capital that participants described as being resources that they could draw on for their applications to be successful or constraints that limited them. An overview of how each participant described each form of capital is provided in Table 7.2.

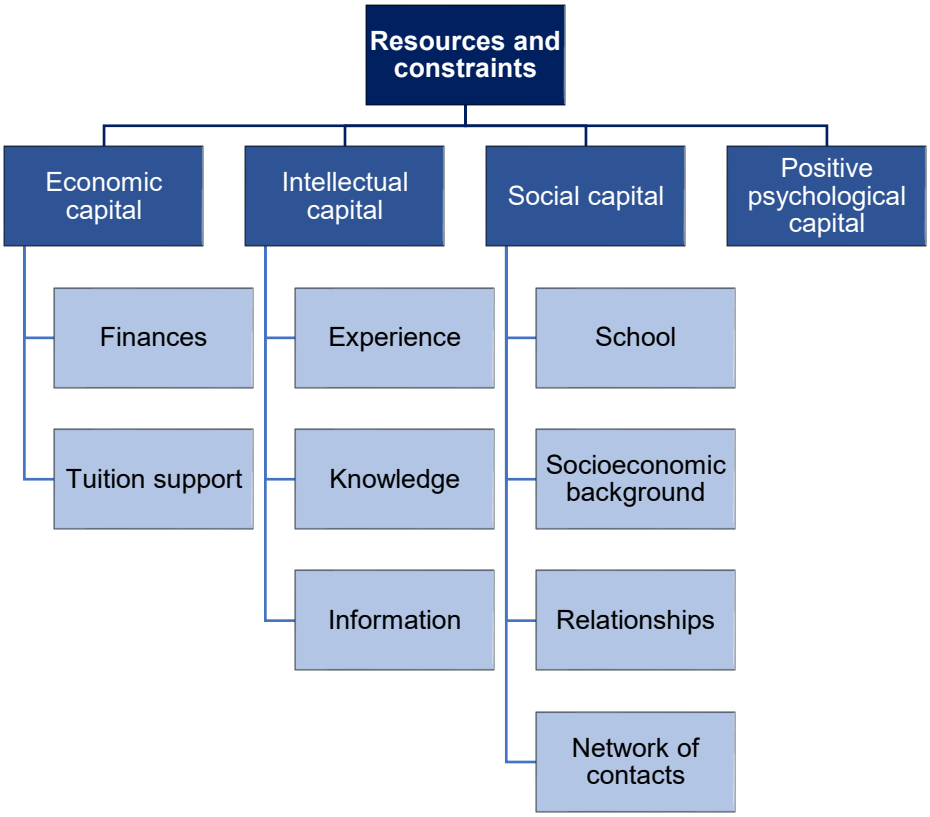

Figure 7.2. Forms of capital that participants described as being resources or acting as constraints on their applications.

Table 7.2. Overview of each participant and how they described each form of capital

		Participant background			Economic capital		Social capital					Intellectual capital							Positive psychological capital				
Category	Individual	Parental education	School type	Area level	Finances	Tuition support	School	Contextual admissions	Social class	Relationships	Network of contacts	Experience	Volunteering	Work experience	WP Scheme	Academic attainment	Admissions test performance	Information	Overall	Confidence	Hope	Optimism	Resilience
Non traditional	Ali				▼	-	▼	-	-	-	-	-	-	-	-	▬	-	-	-	-	-	-	-
	Amir				-	-	▼	▲	▲	▬	-	▲	▲	▲	▲	-	-	▬	▲	-	-	-	▲
	Amy				▼	-	-	▲	-	▬	-	▲	▲	-	▲	-	-	▬	▲	▲	-	-	-
	Emily				▼	-	▼	-	-	-	▲	▬	-	-	▬	▼	-	▬	▲	-	-	-	▲
	Georgia				-	-	▲	▲	▲	▬	▬	▲	-	▲	▲	-	▼	▬	-	-	-	-	-
	Kamal				-	-	▼	-	-	-	-	▬	▲	▼	-	▼	▼	▬	▼	▼	-	-	-
	Khalil				▼	-	▬	-	-	-	-	▬	-	-	▬	-	-	▬	-	-	-	-	-
	Matthew				▼	-	▼	▲	▲	▼	-	▬	-	-	▬	▼	-	▬	▼	▼	-	-	-
	Noor				-	-	▲	-	-	▬	▬	▲	▲	-	▲	▲	-	▬	▲	-	-	-	▲
	Rebecca				▼	-	▬	▲	▲	▬	-	▼	▼	▼	▲	-	-	▬	▼	▼	-	-	▼
Less traditional	Abigail			▶	-	-	▲	-	-	▼	-	-	-	-	-	-	▲	▬	-	-	-	-	-
	Andrei			▶	▼	-	▼	-	-	▬	-	-	-	-	-	▼	-	▬	-	-	-	-	-
	Ayesha			▶	-	-	-	-	-	-	-	▼	-	▼	-	▬	-	▼	▬	▬	-	-	-
	Caitlin			▶	▼	-	▬	▲	-	-	-	▬	-	-	▬	▬	▼	▬	-	-	-	-	-
	Charlotte			▶	-	-	-	-	-	-	-	▬	-	-	▬	▬	-	-	-	-	-	-	-
	Ellie			▶	▼	-	▬	-	-	▬	-	▲	-	-	▲	▼	-	▬	-	-	-	-	-
	Francesca			▶	▼	-	▬	▲	▲	▼	▲	▼	-	▼	▲	▼	-	▬	▼	-	▼	-	-
	Jack			▶	▼	-	▼	▲	-	▼	-	▲	▲	▼	▲	▼	▼	▼	▼	▼	▼	-	-
	James			▶	▼	-	-	-	-	▬	-	▲	▲	▲	-	▼	▼	▬	▼	▼	-	-	-
	Layla			▶	-	-	▬	-	-	▼	-	▲	-	-	▲	▼	-	▼	-	-	-	-	-
	Nicole			▶	▼	▲	-	▲	▲	▬	-	▬	▬	-	▬	▲	▲	▬	-	-	-	-	-
	Nur			▶	-	-	▬	-	-	▲	-	▲	-	▲	▲	-	-	▬	-	-	-	-	-
	Oliver			▶	▬	-	▼	-	▼	▼	▼	▼	▬	▼	▲	▼	-	▬	▼	▼	▼	-	-
	Yusuf			▶	-	-	▬	-	-	▼	-	▬	▲	▼	▬	-	-	▬	▲	▲	-	-	-
	Sophie			▶	▼	-	▬	-	-	▼	-	▲	-	▲	-	▼	▼	▬	-	-	-	-	-
	Emmanuel	▶			▼	-	▼	▲	▲	▼	-	▼	-	▼	▼	▼	▲	▬	▼	▼	-	-	-
	Jordan	▶			▲	▲	▬	▲	-	▬	▲	▲	-	▲	▲	-	-	▬	-	-	-	-	-
	Lewis	▶			▼	-	▲	-	-	▬	-	▲	-	-	▲	-	-	▬	-	-	-	-	-
	Omar	▶			▼	-	▼	-	-	▬	▲	▼	▬	-	-	▬	▬	▲	-	-	-	-	-
	Rachel	▶			▼	▲	▼	▲	▲	-	-	▲	▲	-	▲	▲	▲	▬	-	-	-	-	-
	Shannon	▶			-	-	▬	-	-	▬	▬	-	-	-	-	-	-	▬	-	-	-	-	-
	Victoria	▶			-	-	▼	-	-	▲	-	▲	▲	▼	-	▼	-	▬	-	-	-	-	-
	Yasmine	▶			-	-	▼	▲	-	-	-	-	-	-	-	▼	-	▬	▲	-	-	-	▲
More traditional	Ahmed	▶		▶	▼	-	▬	▲	-	▬	-	▬	-	-	-	▲	▼	▬	▲	▲	▲	-	-
	Aliyah	▶		▶	-	-	▲	-	-	-	-	▲	-	-	-	▼	▼	▬	▼	▼	▼	-	-
	Bethany	▶		▶	▼	-	▬	-	-	▲	-	▲	-	-	▲	▼	-	▬	-	-	-	-	-
	Callum	▶		▶	-	-	▼	▲	-	-	-	▲	▲	-	-	▬	-	▬	-	-	-	-	-
	Chloe	▶		▶	▼	-	-	-	-	▬	-	▼	-	-	-	▲	▬	▼	-	-	-	-	-
	Connor	▶		▶	▲	-	▲	▲	▲	▬	▲	▲	▲	▲	▲	▲	▲	▬	-	-	-	-	-
	Emma	▶		▶	▼	-	▲	-	▬	▲	-	▲	▲	▲	-	▼	▲	▬	▼	-	-	-	▼
	Erin	▶		▶	-	▲	▬	-	▬	▲	-	▲	-	▲	▲	▲	-	▬	-	-	-	-	-
	Grace	▶		▶	-	-	▲	-	-	▲	-	▼	▲	▼	-	▼	-	▬	▼	▼	-	-	-
	Harry	▶		▶	▼	-	▬	-	▼	▲	▲	▲	-	▲	-	▲	▼	▬	-	-	-	-	-
	Holly	▶		▶	▼	-	▲	-	-	▬	▲	▲	-	▲	-	-	-	▬	-	-	-	-	-
	Jakub	▶		▶	▼	-	▲	▲	▲	▬	-	▲	-	▲	▲	▼	▼	▬	▼	-	-	-	▼
	Jessica	▶		▶	-	▲	-	-	-	▬	-	▲	▬	-	▲	▲	-	▬	▲	-	▲	-	▲
	Joseph	▶		▶	▼	-	-	-	▬	▲	-	▼	-	▼	-	▼	-	▬	-	-	-	-	-
	Joshua	▶		▶	-	-	▲	▼	-	▲	▲	▲	-	▲	-	▼	▲	▬	-	-	-	-	-
	Lauren	▶		▶	-	-	▼	-	-	▼	▲	▲	▲	▼	-	▼	-	▬	-	-	-	-	-
	Lucy	▶		▶	▼	-	▬	-	-	▲	▲	▲	-	▲	-	▼	▼	▬	-	-	-	-	-
	Maria	▶		▶	▬	-	▼	▬	▲	-	▲	▲	-	▲	-	▲	▼	▬	▼	▼	-	-	-
	Olivia	▶		▶	▼	-	▬	▼	▼	▬	-	▲	-	▲	-	▬	▼	▬	-	-	-	-	-
	Ross	▶		▶	-	▲	▼	-	-	▬	▲	▲	-	▲	-	▲	▼	▬	-	-	-	-	-
	Sarah	▶		▶	-	▲	▬	-	-	▲	▲	▲	-	▲	▼	-	-	▬	-	-	-	-	-
	Sofia	▶		▶	▬	-	▬	-	-	-	-	▲	▲	▲	-	▼	▼	▬	▼	▼	▼	-	-
	Thomas	▶		▶	▬	-	▼	-	-	-	-	▬	-	▬	-	▼	-	▬	▬	-	▬	-	-
	William	▶		▶	-	-	▬	-	-	▬	-	▲	-	▲	▲	-	-	▬	-	-	-	-	-
	Daniel		▶	▶	▬	-	-	-	-	▲	-	▲	-	▲	-	▲	▼	▬	-	-	-	-	-
	Hannah		▶	▶	▼	-	▬	-	-	▼	-	▲	▲	▲	-	▼	▼	▬	-	-	-	-	-
	Luke		▶	▶	-	-	▲	-	-	▼	▬	▲	▲	▲	-	▼	-	▬	-	-	-	-	-
	Geon	▶	▶		-	-	-	-	-	-	▲	▲	▲	▲	-	▼	-	▬	-	-	-	-	-
	Katie	▶	▶		▼	-	▼	▲	▲	-	-	-	-	-	-	▼	-	▬	-	-	-	-	-
	Mia	▶	▶		▬	-	-	-	-	▲	▲	▲	-	▲	-	▼	▼	▬	▼	-	-	-	▼
Traditional	Megan	▶	▶	▶	-	-	▲	▼	▼	▲	▬	▬	-	▬	-	▲	▲	▲	▼	-	▼	-	-
	Samuel	▶	▶	▶	▬	-	▬	▼	-	▬	-	▲	-	▲	-	▲	-	▬	▲	-	-	-	▲

Key:	▶	Traditional attribute	-	Not discussed	▼	Constraint	▲	Resource	▬	Discussed, but neither desribed as a resource nor constraint

7.2 Economic capital

There are two main forms of economic capital that were relevant to participants when making choices: the finances they had available to them and any financial support for tuition they may be eligible for.

Finances

Many participants discussed how their financial constraints influenced their choices of medical schools. For some this led them to rule out certain schools or entire cities. For instance, as described in Chapter 6, some participants did not consider any medical schools in London as they perceived the city to be too expensive to live in. Others were put off aspects of medical schools during the consideration process, for example if their campus accommodation was expensive.

While very few participants explicitly discussed finances as a resource, those that came from lower socioeconomic backgrounds more frequently described feeling significantly constrained by a lack of finance. For those that reported feeling constrained by finances, there were notable differences in the extent to which these constraints were perceived. For some they wouldn't be able to afford to move out of their parental homes, and so were constrained to their most local medical schools. Others were planning on living in rented accommodation but were avoiding cities with high rental costs.

> *"So you'd be going without food in one area where you could perhaps have had a meal in a different one. […] Because we don't have a lot of money anyway so I think that kind of aspect is so important."*
>
> (Emily, non-traditional applicant to a cluster 3 medical school)

> *"Places like London, the London med schools are amazing, but I just don't think I would have been able to afford it. I just veered away from that straightaway."*
>
> (Hannah, more traditional medical student at a cluster 7 medical school)

Tuition support

Participants who were domiciled in Scotland exclusively considered Scottish schools. This was because tuition fees are funded by the Scottish government for Scotland

domiciled applicants who typically choose to remain for their studies. While this is a significant resource, it resulted in those eligible being constrained, in the most part, to five choices of medical school since there were only five medical schools in Scotland. Even for those participants who were from wealthy families and were not otherwise constrained by finances, only Scottish schools were considered. This is because the cost of tuition fees over five years is substantial, and they wanted to avoid incurring this debt. This therefore restricted their potential choices to Scottish medical schools. When asked if they could go to any UK medical school with no extra cost implications, some Scottish domiciled participants did discuss being attracted to some of the highly prestigious medical schools in England, but most found it difficult to discuss as they had never considered universities outside of Scotland as they simply did not perceive this to be an option.

"Obviously your first degree is paid for by the Scottish government; that was the only way I could really afford it."
(Rachel, less traditional applicant to a cluster 1 medical school)

7.3 Social capital

Four main subtypes of social capital were identified for applicants to medical schools. The first two concern the groups in which applicants find themselves - namely, the school they attend (or attended) and their socioeconomic class. The other two relate more explicitly to the contacts they have: their direct relationships (often family members) and their broader network of contacts. These four sources of social capital, or the lack thereof, were seen by participants as either resources or constraints when applying to medical schools.

Notably, the subtypes of social capital appeared more interlinked than those in other forms of capital. This interconnectedness likely stems from participants' socioeconomic background, which is influenced by their relationships and, in turn, affects the school they attend and the network of contacts they can access.

School

Schools were perceived as a resource for four reasons: the support that they offered their students, their reputation, their previous experience in supporting successful medical applicants, and providing an environment in which students can network with their peers.

Participants had varying thoughts regarding whether the schools they had attended were a resource or a constraint. Schools were described as constraints more frequently by non-traditional and less traditional students and were rarely described as resources by these groups. Conversely, more traditional and traditional participants more frequently described their schools as being resources, but some did still describe their schools as constraints, albeit fewer than those from non and less traditional groups. I will first describe the ways in which schools were described as being resources, before illustrating how these were differentially described by participants from different backgrounds.

Support

The support provided by schools varied from teachers advising students to look at medical schools' websites online, to full 'premedical' programmes with timetabled lessons, support writing personal statements, mock interviews, and facilitated work experience. There were numerous ways in which schools were seen to be supportive. A list of these and indicative quotes can be found in Table 7.3.

Some participants discussed having good support from their schools for applying for medicine. It was much more common, however, for participants to describe feeling under-supported by their schools and feeling that students from other schools were receiving more support and had a competitive advantage. For example, Jack describes how he perceived students at fee-paying schools were provided more support whereas those at state-funded schools had to be more proactive. He demonstrates an internal locus of control, whereby he considers that while others may have more external support, he still has the ability to be successful in the admission process through his own actions (see Positive psychological capital).

> *"So, I think that those institutions [private schools] are giving the students… pushing the students at every opportunity to make sure that they get there. Whereas if you're in the state education you've kind of got to … you've got to put that effort in yourself, and if you're not determined then you're not going to be able to get in. I think, so that was probably more of a disadvantage than anything else."*
>
> (Jack, less traditional medical student at a cluster 6 medical school)

Some participants only became aware of the support that others received when they started studying at medical school and heard from their peers about what their schools had offered. Amir described how he thought he got as much help as other pupils when he was applying to medical school, but later learned that other schools offered more support. This suggests that even those that describe their schools positively may be at a relative disadvantage compared to applicants from other schools.

> *"They didn't really offer, like, support. Like, when I am talking to students now at (university) and see what they had, they had a lot more support. […] Because most of them were private schools and stuff like this, and grammar schools, everyone aimed for the top universities. Whereas my school, they didn't. So, by aiming for (university), it was already something really big for my school. Which I mean it shouldn't be for most schools. And applying for Medicine, I didn't really get the… I thought I got the help. I thought that was normal. But now, speaking to others, they got way more help. They got, like… They went to different, like, just like days or seminars on how to do your personal statement and stuff. Which I never got. So, I thought, like, I don't know. That's just the difference between different schools, I guess."*
>
> (Amir, non-traditional medical student at a cluster 4 medical school)

Table 7.3. Ways in which schools supported applicants

Form of support	Indicative quote
Assistance / guidance with personal statements	"I got teachers from school to read over it quite a few times. All around the school basically" (Joshua, more traditional applicant to a cluster 5 medical school)
Medicine co-ordinator	"One of the teachers at school was like an expert in medical applications, and she was really helpful." (Megan, traditional medical student at a cluster 3 medical school)
Helping with choice	"Because I picked [university X], [university Y] and [university Z], which are really, like, three really big ones. And they said you shouldn't really do that. You should pick… If you really want to, pick two big ones and then two ones that are, like, more easy to get into." (Amir, non-traditional medical student at a cluster 4 medical school) "I think in some ways that's where my school was lacking. They weren't able to help me in my choice in a way. And I think if they'd have had a better idea of places that were better suited for their students, I think they would get more out or possibly may have got more interviews or more applicants applying." (Olivia, more traditional medical student at a cluster 7 medical school)
Interview preparation	"I had a mock interview for, like Lancaster MMI interview and so school had put on a mock interview for me and it took a lot of time to get that organised because they had to do a lot of research as to what MMI was" (Olivia, more traditional medical student at a cluster 7 medical school)

Form of support	Indicative quote
	“Then when you got an interview, small group sessions were run to practice the two different interview styles.” (Grace, more traditional medical student at a cluster 2 medical school) “My Sixth Form had quite good information of what kind of questions each medical school would ask in an interview.” (Aliyah, more traditional medical student at a cluster 4 medical school)
Information about medical schools / admissions procedures	“Sort of can give you that extra bit of information. Because they know previous students have applied and everything, they can give you the extra bit of information about it that you might not see from the university website.” (Georgia, non-traditional applicant to a cluster 2 medical school)
Medicine lessons	“my school, they’re very like on it and we had separate lessons, we had a whole timetable of lessons on medicine applications.” (Megan, traditional medical student at a cluster 3 medical school)
Signposting to resources and opportunities	“My school has a weekly bulletin with opportunities.” (Francesca, less traditional applicant to a cluster 4 medical school)
Support / guidance with admissions tests	“They’ve given us loads of information about it.” (Erin, more traditional applicant to a cluster 1 medical school)

Form of support	Indicative quote
Facilitate work experience	“We had someone at school who her husband was a surgeon at the town hospital and she got us all six weeks on our Wednesday afternoons where we went up and went to a different department each week.” (Emma, more traditional medical student at a cluster 2 medical school)
Predicting grades	“Like I said, I thought the predictions that my teacher gave me, I thought that was… that annoyed me. And so I thought that would have worked against me.” (Jack, less traditional medical student at a cluster 6 medical school)

Status

Some participants from state-funded schools believed that certain universities favoured applicants from private schools because of those schools' reputations, rather than only because these applicants typically have higher academic attainment and were likely to perform better in other selection measures due to the support they received from their schools.

> *"There is always the thought that coming from a fee-paying school that's got a very good name if that would... I have no idea, I don't think so in many medical schools. But I am not entirely sure about the more traditional universities, whether they favour people from better-known schools. I am not entirely sure in all honesty."*
> (Ross, more traditional applicant to a cluster 1 medical school)

Conversely, participants who attended fee paying schools felt that this may be a constraint. Some felt that they may be treated less favourably because of the school they attended. This included participants who were otherwise from relatively non-traditional backgrounds, but who had been awarded scholarships to fee-paying schools. Katie describes this tension of benefiting from the education she had through her scholarship to a fee-paying school, but then becoming ineligible for other opportunities.

> *"The fact that I went to a private school, on a scholarship. […] There was no point in saying that I went on a scholarship. Which was kind of frustrating, because I felt like kind of went against each other. Because the background I came from meant that [inaudible]. And then when I went to this school, it kind of dismissed that I was from that background."*
> (Katie, more traditional medical student at a cluster 6 medical school)

Experience

Participants described their schools' experience in supporting previous applicants to medical school. This was either in that they perceived their school to be generally experienced in supporting applicants, and from this had developed tacit knowledge that they could use to support them, or that they felt their school had links with particular medical schools. Participants described applying to medical schools that

they knew previous students from their school had been successful in applying to. They appeared to believe they would be more likely to receive offers from these schools.

> *"A lot of students at my school have gotten offers from them before."*
>
> (Georgia, non-traditional applicant to a cluster 2 medical school)

Furthermore, students avoided medical schools where applicants from their school had been previously unsuccessful. In some instances, they had been advised not to apply to these medical schools by their teachers.

Students

Another way in which schools were described as resources was in acting as a catalyst for networking with other students. This included other current students who were applying to medical schools, and past students who had been successful and were currently studying at medical schools. Students in schools with numerous applicants described working together to collate information on different medical schools and discussing choices with each other.

> *"Well, at my sixth form secondary school, we had a MedSoc because we had 19 students in that year wanting to apply, 19 or 17, something like that, wanting to apply and then another 17 in the year below, so we had quite a big basis for a MedSoc. So, we all supported each other in finding out information about different medical schools and then we all had Excel spreadsheets of the medical school, like, city or town, what the campus was like, the accommodation, the grade requirements, the style of teaching. So, it was a big spreadsheet, so I went through, looked at my grades, what I though was achievable and, like, narrowed it down to where I wanted."*
>
> (Abigail, less traditional medical student at a cluster 5 medical school)

Finally, participants described a culture of past students from their schools who were now at medical school supporting them through visiting to give talks and providing advice on applications.

"If you've got old students, they're more likely to come in and give you a talk than just a random student from elsewhere. So, because we had a culture of getting a few people to medical school each year, they could come back and help the next ones, and it makes it easier each time, I think. I was very lucky with the school I went to."

(Emma, more traditional medical student at a cluster 2 medical school)

Socioeconomic background

Almost half of the participants discussed how their socioeconomic background might be a resource or a constraint in their medical school applications. Most often this was regarding eligibility for contextual admissions or gateway programmes. Those who met eligibility criteria for these programmes described their socioeconomic backgrounds as a resource. A small minority of participants from (more) traditional backgrounds described feeling that they were discriminated against by medical schools, for example Samuel who perceived medical schools were 'biased against private school'.

"I think the fact that my parents didn't go to uni was a good thing […] they told us that if your parents didn't go into uni, it's more likely that you will be accepted."

(Amir, non-traditional medical student at a cluster 4 medical school)

"(university) was biased against private school and stuff, so I think because I came from quite like a privileged background…"

(Samuel, traditional medical student at a cluster 5 medical school)

These perceptions appear to be underpinned by the way in which contextual admissions and the widening participation agenda are understood. Some participants thought that medical schools had explicit quotas they needed to fill for entrants from specific socioeconomic groups. This led to resentment by those that were not eligible for these programmes, and paradoxically, feeling undervalued by those that might be eligible. Several participants who were eligible for contextual admissions or gateway programmes described wanting to get in on their own merits and not wanting to be a 'government statistic'.

"My dad's always told me that each university has to have a small percentage of people from less economically developed backgrounds, for people who come from broken homes and everything"

(Rebecca, non-traditional applicant to a cluster 7 medical school)

"They only have these quotas because to make them look better as opposed to actually getting those who struggled in basically […] lots of admissions people said, yeah we're forced to do this because just we have to have quotas of people who do this and people who don't do it."

(Joshua, more traditional applicant to a cluster 5 medical school)

A minority of participants demonstrated an appreciation of the influence socioeconomic background might have on both attainment and opportunities, and that widening participation initiatives were aimed at redressing these.

"I know a lot of people said that 'oh you go to a [state funded school], so you are disadvantaged'. But, I sort of thought maybe it's the opposite because so many people who apply to medicine go to private schools. There's a lot more sort of that's expected of them perhaps. Like if you're paying £13,000 and you've got state of the art facilities and things you should realistically be getting three A stars."

(Ahmed, more traditional applicant to a cluster 5 medical school)

"So, I'm sure that my application would not have been as good, had I not come from a privileged background. That's not to discount the work I did for my exams, not to discount the work I did for my UKCAT and I always talk about this to my family and they say, 'oh, don't feel guilty'. But yes, I'm sure I wouldn't have been as successful, had I not had these opportunities which came really, from my family situation."

(Connor, more traditional applicant to a cluster 1 medical school)

Relationships

Most participants described discussing their applications with their parents. Parental input varied from participants informing them where they intended on applying, to

working together to scrutinise each and every medical school in the country. Fewer than half of the participants expressed that their parents would act as a resource or constraint and have an overall advantage or disadvantage on their applications. Parents were described as a resource when they were qualified as health professionals because they provided greater insight into the profession, and also because they were able to facilitate work experience in medical settings. Parents were primarily described as a constraint when they were not healthcare professionals and therefore these participants did not enjoy the privileges this offers.

Participants who described their parents as constraints were predominantly from non- and less traditional backgrounds, however, there were still several that were otherwise from more traditional backgrounds but whose parents were not doctors and described feeling constrained by this. This latter group of participants might have been more conscious of the benefits of having doctors as parents as they are arguably more likely to have friends in their local communities and schools whose parents are doctors, and consequently been more aware of the benefits this had offered their peers.

> *"Obviously, a lot of these privately-educated pupils have families with doctors in them, so they're more likely to be able to get shadowing experience. Whereas that's something that I wouldn't have been able to get."*
> (Jack, less traditional medical student at a cluster 6 medical school)

> *"I went to work experience at her [her mother's] GP surgery and was sitting in with one of the GPs and she was chatting to me about her husband who is an ophthalmologist, but then I asked if I could get work experience with him? And then it kind of progressed from there. So, you do have access to people that if you didn't I think it would be harder…"*
> (Sarah, more traditional applicant to a cluster 1 medical school)

There was one notable exception; Nur felt that it was advantageous to be the first in her family to be applying for university as this was an eligibility criterion on some widening participation schemes that included work experience placements. She appeared to feel that the benefits this brings outweigh the advantages of having a parent who is a doctor.

"I think because people with parents without a university degree, I think it's easier, I think they find it easier to have opportunities such as work experience. And I've definitely had a better chance of getting work experience because my parents aren't doctors or don't have university degrees."

(Nur, less traditional applicant to a cluster 4 medical school)

Network of contacts

Some participants described having contacts through extended family or family friends that they considered resources. These individuals were used in three ways: for general information regarding careers in medicine, for support and critical review of personal statements, for facilitating work experience. With one exception, these contacts were only discussed in the context of being a resource for applicants and were predominantly discussed by participants in the more traditional group.

"So, had I not had the connections that I do have, I wouldn't have been able to do the work experience that I did do, and then, I don't think I would have been as impressive in my personal statement or as impressive at interview because I would have had less things to talk about."

(Connor, more traditional applicant to a cluster 1 medical school)

"I think it's pretty important, I mean in an industry like medicine I think it's definitely a case, a lot of the time, of who you know rather than what you know so yes, I do think it's important to have contacts."

(Lauren, more traditional applicant to a cluster 7 medical school)

As alluded to earlier, one participant described the absence of such contacts as a relative constraint on his application. Oliver describes how he feels those who are able to utilise connections in order to get work experience have a competitive advantage over others.

"I just think that people that have got these sort of connections and ability to get into hospitals have advantage over people who don't."

(Oliver, less traditional applicant to a cluster 6 medical school)

He conflates the existence of these connections with attendance at private schools, suggesting that many of these factors regarding contacts, relationships, schools, and socioeconomic background are interrelated.

7.4 Intellectual capital

There were three main types of intellectual capital described by participants in this study: experience (their previous work and volunteer experience), knowledge (in terms of academic attainment and admission test performance) and information they knew about different medical schools. Skills, which form part of the definition of intellectual capital and is included in the subtypes of human capital in Luthans' framework, did not feature in participants' discussions.

Experience

Participants described their experiences in preparation for applying to medical schools. There was consensus that experiences such as volunteering, paid employment, and work shadowing were valuable. They perceived these experiences as something medical schools highly regard, considering them at least as important as academic attainment. Such experiences were seen as essential for standing out from other applicants with similar grades, both in personal statements and to inform their answers during interviews. Although some participants had been told that personal statements were no longer used to select candidates for interview, they found it difficult to believe this in practice.

> *"Work experience is just as important as grades I would say."*
> (Ayesha, less traditional applicant to a cluster 4 medical school)

> *"I think it's really important. Like as much as they say that it's not important, like how else would they differentiate between two basically identical students? Because they don't know anything else about us except predicted grades and GCSE grades. Yes, I think that it is really important."*
> (Layla, less traditional applicant to a cluster 4 medical school)

The majority of participants described the sum of their experiences as an overall resource or constraint. The types of experience that were described most to contribute to this were volunteering, medical work experience, and participation in widening participation schemes.

Participants from more traditional and traditional backgrounds mostly described their experiences as resources. This was typically driven by medical work experience which was, by many, considered to be the gold standard for experience. Participants felt it was essential to get medical work experience, and often aimed to experience multiple different settings. Those that had medical work experience described it as a resource, and those without considered it a considerable constraint. As described earlier, most participants from more traditional backgrounds organised work experience through their parents or network of contacts. Participants from less traditional backgrounds were not afforded this privilege and many felt constrained by their lack of work experience. These participants mitigated against this constraint through participation in widening participation schemes. For those participants from less traditional backgrounds that had been able to undertake medical work experience, this was often facilitated through widening participation schemes.

"I've been given the impression that some work experience is looked at more favourably than others. So, working in hospitals and working at care homes are kind of your go-to types of the working experience"

(Oliver, less traditional applicant to a cluster 6 medical school)

"Not being able to gain work experience in a hospital, I tried really hard, but it is so difficult because, you know, everyone wants it and it is normally a case of who you know rather than what you know."

(Lauren, more traditional applicant to a cluster 7 medical school)

"Nowadays especially, it's quite rare for anyone, most medical schools to consider you if you haven't had actual medical work experience."

(Grace, more traditional medical student at a cluster 2 medical school)

"I was trying to get work experience to bolster my personal statement, so I think that [widening participation scheme] sort of tries to find a way to get around that, and it was one of the leading things that I talked about in my personal statement."

(Jack, less traditional medical student at a cluster 6 medical school)

Knowledge

Participant's knowledge was an important component of their intellectual capital. They described both their previous or predicted academic attainment and their performance (or anticipated performance) on admissions tests. While both are commonly viewed as assessments of knowledge, admission tests also measure aptitude. Not all participants characterised their knowledge capital uniformly as either a resource or a constraint. For some, this form of capital was more nuanced—for instance, they might have excelled in academic qualifications (e.g., GCSEs, A-Levels, Scottish Highers) but performed poorly on one or more admissions tests, or vice versa. Overall, academic attainment was most frequently described as a constraint, and this perception was reported with similar frequency across participants from different socioeconomic backgrounds.

Another interesting feature within participants' discussions of their knowledge capital, were how different participants would describe the same objective attainment variably as a resource or constraint. In particular, participants' perception of academic attainment appeared to be relative. What might be considered good grades by one participant may be seen as insufficient by another. This might be because these participants have aspirations for more prestigious schools. While their grades may be quite sufficient for the majority of medical schools, they may constrain their applications to the most prestigious schools.

> *"I'd say it was 90% my grades. You always have this perception, you're always told, people that apply to medicine, they have 20,000 A stars. And you're like, 'wow, but I only have a few'. You have this mind set. Well, I had the mind set of, I don't choose. The grades choose for me, because I don't have a choice. Because I came from a non-selective high school, my GCSEs were good, but not as good as everyone else's. Or not as good as how you hear your grades should be."*
>
> (Aliyah, more traditional medical student at a cluster 4 medical school)

"I found it a challenge. It wasn't really like anything else I had done before. Obviously, you have time pressures on normal written exams, but this was crazy time pressure. I suppose this is a part where your background, the opportunities that are afforded to you comes into play, but I was able to go on a course for my UKCAT, to practise it. I went on a Kaplan course and spent a weekend practising questions, hearing about techniques for the test."

(Connor, more traditional applicant to a cluster 1 medical school)

Information

The final aspect of intellectual capital that participants described was how much information they knew about different courses and their respective entrance requirements. They described gathering information about different medical schools though various sources: websites, online fora, open days, outreach activities, prospectuses, and books. Websites were the most frequently used source of information followed by open days.

While almost all participants discussed how they gathered information on schools in order to inform their choices (this was explicitly asked as part of the interview schedule), it is notable that only a small minority perceived that their access to information on different schools was a resource or constraint.

"I wasn't researched enough in what university would be best for me."

(Jack, less traditional medical student at a cluster 6 medical school)

7.5 Positive psychological capital

Almost half of the participants referred to elements of positive psychological capital that they considered to be resources or constraints with regards to applying to medical schools. Across all background groups, participants more frequently described an absence rather than a presence of positive psychological capital. This was most profound in their discussion of confidence and hope. Here participants, particularly those from lower socioeconomic backgrounds, described not having the cognitive resources to be able to be successful in their applications. James, for example, who

was a mature applicant described how he didn't have the confidence to apply when he was a school leaver.

> *"I wouldn't have believed I would have been able to do it. I didn't think I was intelligent enough, or had the confidence or ability to do it."*
>
> (James, less traditional medical student at a cluster 3 medical school)

Similar to confidence, participants more frequently described low levels of hope affecting their applications. Oliver describes a sense of futility with applying to certain universities

> *"That's another aspect that's kind of putting me off really. Just the futility of applying there. It kind of makes me wonder am I just wasting a space in my application form; should I think more realistically here, and think about one of the medical schools I should be applying to…"*
>
> (Oliver, less traditional applicant to a cluster 6 medical school)

The subtype of positive psychological capital that was more frequently described as a resource than as a constrain was resilience. While this was only explicitly discussed by a minority of participants, many more had demonstrated features of resilience when describing their experiences. It was more frequently identified as a resource by those from lower socioeconomic backgrounds and typically as a means by which they overcame some of the other constraints they experienced.

Finally, it was notable that no participants explicitly discussed how their optimism or pessimism may influence their success in their applications to medical schools.

7.6 Discussion

This chapter examined how applicants described their perceived resources and constraints with regards to applying for medical school, and how these were influenced by their socioeconomic backgrounds. The findings highlighted that various forms of capital (economic, social, intellectual, and positive psychological) play significant roles in shaping applicants' decisions. Participants constructed perceptions of how strong a candidate they were for applying to medical schools based on their levels of these different forms of capital. There were notable differences in the extent to which different forms of capital were perceived to be

strengths or resources amongst participants from different socioeconomic backgrounds. By examining the ways in which participants interpret their resources and constraints, this chapter contributes to our understanding of how socioeconomic status influences medical school choice.

Economic capital was a frequently discussed constraint, particularly by applicants from lower socioeconomic backgrounds. This group expressed concerns about the financial demands of attending medical school, from tuition fees to the cost of living.

Social capital was a particularly important factor. Participants from both traditional and non-traditional backgrounds highlighted how their school experiences influenced their decision-making process. Interestingly, students from non-traditional and less traditional backgrounds frequently perceived their schools as constraints, citing lack of support, limited guidance on medical school applications, and lower expectations for success. In contrast, participants from traditional backgrounds more frequently viewed their schools as resources, benefiting from extensive support structures, including guidance on personal statements, interview preparation, and work experience opportunities. Evidently some schools are more aware of the admissions procedures of medical schools and are able to better support their pupils to make successful applications.

Contrary to findings in existing literature, participants from non-traditional and less traditional backgrounds frequently perceived their backgrounds to be a competitive advantage. This was because their backgrounds conferred eligibility to widening access programmes including outreach schemes and contextual admissions. Perhaps the most striking finding was that participants from traditional and more traditional backgrounds described their social backgrounds as a disadvantage. This ‘traditional disadvantage’ was because they were not eligible for widening participation schemes and contextual admissions. As the old adage goes ‘when you are accustomed to privilege, equality feels like oppression’. This may be a consequence of poor understanding or communication regarding widening access policy. However, this is perpetuated by those at medical schools that describe these as quotas rather than redressing inequalities.

Conclusion

This chapter illuminates the ways in which applicants’ perceptions of their resources and constraints in medical school selection are shaped by their socioeconomic backgrounds. Perceived levels of different forms of capital such as economic, social, intellectual, and positive-psychological capital impact how competitive an applicant

may consider themselves to be. Consequently, while they may have strong preferences for the medical schools they would ideally like to attend (see Chapter 6), they may not ultimately apply to these. The next chapter will explore how applicants weigh their priorities with their perceived resources and constraints to make choices regarding which medical schools to apply to.

Chapter 8. Strategies

In this chapter I discuss how participants described the choices they made in applying to medical schools and how they formulated these. In this final analysis I explore how participants weighed up their priorities and perceived resources and constraints, and the various approaches to medical school choice that they employed. This chapter moves beyond participant descriptions of their preferences and backgrounds, to explore the choices they made in applying to medical schools and how these were formulated. In doing so I have identified linkage between the themes discussed in the preceding two chapters and participants socioeconomic backgrounds. Through exploring the interplay of these, I have identified different strategic approaches to medical school choice and have categorised these into five types.

Firstly, I read through all the transcripts to refamiliarise myself with the participants' stories, focusing this time on how they described making their choices, rather than the features of the medical schools they chose. I made notes of different overall strategies and tactics for picking individual schools. I used the Oxford English Dictionary definition of strategy as "a plan, scheme, or course of action designed to achieve a particular objective" (200). I considered a tactic to be a step a participant took to enact their strategy. Next, I constructed a summary for each participant's approach to choice outlining the key steps. For each summary I reviewed their transcript again and identified the following features: background, significant constraints they discussed (i.e. forms of capital they perceived would make it less likely for them to obtain an offer), significant resources (i.e. forms of capital they felt would make them more likely to obtain an offer), and what they described as their top priority when choosing medical schools (i.e. the objective that their strategy was designed to achieve). I summarised their overall strategies for picking individual schools. An example annotated summary is shown in Box 8.1. I reviewed these summaries and constructed different thematic types of strategy. These types of strategies represented distinct ways in which participants made their choices of which medical schools to apply to.

Box 8.1. Annotated summary for Amy

Amy was an applicant from a state funded, non-selective school. She felt she had not performed well on her GCSEs. She was aware that due to her background and participation in widening participation schemes she was eligible for contextual admissions. She wanted to go to a medical school with a 'studious aesthetic'. She wanted to focus on preparing for one admissions test. She chose four medical schools that used BMAT; two she was eligible for guaranteed interviews at and one where she was eligible for a reduced grade offer.

Key: Background | Constraints | Resources | Priorities | Strategy

I categorised each participant's summary into one type of strategy. After having grouped the summaries based on their type of choice strategy, I reviewed the transcripts and data extracts for participants within each type to identify linkage between participants' priorities, forms of capital, and strategies employed. In particular I was looking for contextual linkage (190) i.e. were there certain circumstances in which participants employed different types of strategies. In order to identify linkage, I reviewed the transcripts to explore how participants described the reason for employing the strategies they had used. I reviewed these case by case within each type, to determine priorities or forms of capital that were linked to the strategy. Finally, I considered each type of strategy through lenses of the theories of choice discussed in Chapter 3.

I categorised participants' approaches to choosing medical schools into five types of choice strategy. The strategies that individual participants employed appeared to be influenced by their perceptions of the resources and constrains they perceive to have in terms of different forms of capital. There was variation within the approaches used in each type both in terms of the objectives that participants were trying to achieve and exactly how they operationalised their strategy. Strategies also varied in their degrees of economic rationality. Here I will present the five types of strategies with illustrative case summaries for each.

8.1 Maximising priorities (n=25)

This was the most frequently employed type of strategy. Strategies varied from maximising a single priority (e.g. applying to the four medical schools perceived to be most prestigious, applying to the four most proximal medical schools) to identifying medical schools that provided a good balance across a range of the applicant's

priorities. Within this type there were still strategies that aimed to mitigate against risk of not receiving any offers. For example, Jakub (*Box 8.2*), applied to two schools that required BMAT and two that required UCAT. He wanted to attend a prestigious and 'academic' medical school, many of which used BMAT at the time of data collection. However, due to the uncertainty regarding how he would perform in BMAT at the time of application he also applied to medical schools that used UCAT. He already knew his UCAT score and felt he had done well (perceived resource).

Box 8.2. Jakub

Jakub was an applicant from a state funded, selective school. He felt he had good GCSEs, a good UCAT score, and was eligible for contextual admissions. He wanted to attend a prestigious university with an 'academic vibe'. He made a large spreadsheet with all the medical schools and details regarding his priorities. He applied to two medical schools that used UCAT and two that used BMAT. He applied to two 'stretch' and two 'safety' medical schools – based on his perception of entry requirements. One of his four choices was a gateway programme.

Jakub aimed for utility maximisation by making choices that he believed would give him the most satisfaction. In determining these choices, he attempted to create complete preferences by identifying all the available options (medical schools) and considering how much satisfaction they would give him by assigning a score for each priority.

> *"I had an excel spreadsheet with all the lists and why or why not. […] I've got a whole list of which and mostly why not, and I have some major factors. Course structure, town expenses, academic staff, ability to do master's and PhD, and a few others. I just gave them a score or take aways."*
>
> *(Jakub, more traditional applicant to a cluster 5 medical school)*

Given he had a number of resources and did not perceive himself to have any significant constraints, maximising priorities was the approach most likely to lead to utility maximisation. This relies on the assumption that he has good insight into his resources and constraints.

Converse to Jakub, Sophie (*Box 8.3*) perceived she had relatively low levels of most forms of capital. However, she still adopted a strategy of maximising priorities. While she was seeking utility maximisation in doing so, there may be a risk that this strategy

would not maximise her chances of getting an offer for medical school. For most applicants, I argue it is likely that they would get more satisfaction from being admitted to a medical school that does not fulfil all their priorities than not being admitted to any at all. However, this will also depend on the extent of their economic capital. If an applicant, such as Sophie, is not able to afford to attend medical school unless they are able to live at their family home, then there is little point in applying to medical schools for which they would not be able to take up an offer of study. Similarly, there were examples of participants who described themselves as unable to leave their family home for cultural reasons.

Box 8.3. Sophie

Sophie was from a state funded, selective school. She felt she had poor UCAT, that her GCSEs let her down and that she had limited work experience due to not knowing any doctors. She was the first in her family to attend university. She wanted to study at a medical school close to her family home due to needing to live at home because of limited finances. She applied to the four closest medical schools.

From a neoclassical economic perspective, it could be argued that these strategies aimed at maximising priorities, and therefore seeking to maximise utility, are the most rational. Referring to the assumptions of rational choice theory outlined in Figure 3.2, the first might be met for all of these participants (that we aim for utility maximisation). However, this relies on a further assumption that they would be successful in receiving an offer from these medical schools. This does not take into account the risk that is considered in expected utility theory. Furthermore, few participants adopting this type of strategy made complete preferences. Jakub was a rare example of a participant that described comparing all of the available medical schools against the attributes he desired. The majority of the participants using a strategy of maximising priorities described selecting from relatively small consideration sets.

8.2 Playing to strengths (n=13)

The next most frequently employed type of strategy was ‘playing to strengths’. Here, participants would identify what they think different medical schools valued in applicants in order to apply to schools that sought what they felt they had to offer. This type of strategy was typically employed when participants felt that they had particularly strong resources in one area or if they had low level of a specific type of

capital that they felt might constrain their applications. One example of this type of strategy is Kamal (Box 8.4). It is worth noting that he found the advice to adopt this strategy on an online forum (*The Student Room*) rather than being advised by his school or any direct contacts. He was a reapplicant and in his first application had used a strategy of maximising priorities. Having been unsuccessful in obtaining an offer he did further research prior to his second application. Following his reapplication, Kamal was not only successful in obtaining an offer, but he received an offer from a medical school he perceived to be very prestigious, his highest priority.

Box 8.4. Kamal

Kamal was a first-year medical student at a London medical school that was a member of the Russell Group and ranked highly in league tables. He moved to the UK from Southeast Asia with his family at a young age. He attended a state funded school and obtained the highest GCSE grades in his school. He then attended a sixth form academy and got A*AA at A-Level (again, the highest in his year at his school). He felt he had a good personal statement but felt constrained by only having a "decent" UCAT score.

He wanted to study at a medical school that was "really academic [with] good research opportunities". He applied to four medical schools when he was in sixth form but was unsuccessful. He reapplied the following year and was successful. He read on *The Student Room* that he should "play to his strengths rather than apply where he wanted to go" and adopted this strategy. His strategies were:

- To identify medical schools that placed little emphasis on UKCAT or used thresholds that he had exceeded.
- To choose two 'safety' medical schools where he was confident he would be invited for interview.

In order to employ this type of strategy, applicants had to undertake some extent of research exploring the options available to them and identifying what they perceive different medical schools valued in applicants.

Occasionally, playing to their strengths meant applicants had to forego certain priorities they had originally identified, opting instead to apply to medical schools where they perceived the highest likelihood of receiving an offer. Ahmed's case illustrates how some participants balance their priorities against the perceived

likelihood of getting in to medical school, within the context of their perceived resources and constraints.

Box 8.5. Ahmed

Ahmed was an applicant from a state funded, non-selective, school. He felt he had 'really good' GCSEs but his UKCAT and BMAT performance was 'around about average'. However, he scored in the top band of the UKCAT SJT, which he felt was a strength in his application. He also felt he had a strong personal statement (he was head boy at his school, had hobbies including football and photography). He wanted to attend a medical school proximal to his home (which he defined as within 'an hour or so'), that used a variety of learning approaches including early clinical experience within a spiral curriculum. He applied to four medical schools that he felt would give him 'the best sort of possibility or the highest chance of getting into medical school'. One of these was a four-to-five-hour drive away, despite proximity being one of his highest priorities.

Ahmed weighed his priorities against the likelihood of getting in. Only one of his choices was somewhere he did not particularly want to study, but he chose this medical school as he felt it gave him the best chance.

> *"My decision for [university D] was sort of purely based on me getting in. So, for [university A] and [university B] and [university C] to some extent I liked the universities. Whereas for [university D] I sort of wanted a place where if all else fails I've got a good chance of getting in there based on my portfolio. Like in the sense that my GCSEs were strong, my UKCAT was sort of average. So, I needed a university which would sort of look at that [GCSEs] and my personal statement more than my UKCAT score. And, my predicted grades as well."*
>
> *Ahmed, more traditional applicant to a cluster 5 medical school*

In seeking to play to their strengths, participants used a range of specific tactics depending on which areas of their application they felt were strong or poorer. These tactics, and when they were employed, are summarised in Table 8.1

Table 8.1. Strategies used to play to strengths.

Strategy	When / why employed
Applied to medical schools who place minimal weighting on UCAT score	When considered to have performed poorly or average on UCAT (Harry, Aliyah, Kamal, Ahmed, Daniel, Olivia)
Applied to medical schools who place emphasis on SJT component of UKCAT.	When consider to have performed well on UKCAT SJT (Ahmed)
Applied to medical schools that have a UKCAT threshold	When perceive to have performed well on UKCAT and exceed threshold (Chloe)
Applied to schools with limited emphasis on GCSEs	When had poor GCSEs (Emily)
Applied to medical schools with an emphasis on academic attainment at GCSE	When consider to have good GCSEs (Ahmed, Samuel)
Applied to mix of medical schools that use UCAT and BMAT	When had poor UCAT (Aliyah, Olivia)
Only applied to medical schools using UKCAT	When wanted to focus on preparation for one admission test rather than both(Abigail)
Applied to medical school with perceived emphasis on personal statement	When perceive to have good experience capital (i.e. work experience, voluntary work). (Ahmed, Aliyah, Samuel)
Chose one ‘stretch’ or ‘risky’ university choice	When generally risk averse with other choices (Oliver)
Applied to ‘safety’ medical schools	When trying to minimise risk of not receiving any offers (Kamal, Abigail, Ahmed)
Applied to medical schools with lower grade requirements	When had low predicted grades (Caitlin)

8.3 The Scottish approach (n=10)

Applicants who were domiciled in Scotland were eligible for free tuition if they studied at a Scottish university. Regardless of their individual capital, they all had the significant economic capital resource of tuition support. The majority of Scottish domiciled participants in this study exclusively applied to Scottish universities. Two participants applied to three Scottish medical schools and one English medical school (both choosing the same, highly prestigious, English medical school). Their choice process, therefore, were significantly different to participants domiciled in England and Wales. In describing their application process, rather than describing how they chose the four medical schools to apply to, most Scottish domiciled participants described how they chose which of the five Scottish medical schools *not* to apply to. Broadly speaking, they maximised their priorities within the subgroup of Scottish medical schools. They chose not to apply to schools based on distance (Jessica, Erin, Shannon), the geographical area (Connor), the course style (Sarah, Rachel, Ross, Nicole) and their siblings studying there (Jordan).

Sarah applied to four Scottish medical school. She stated it was a "*no brainer to go for Scottish unis because otherwise we'd have to pay fees and there's only five to choose from and you can only apply to four*" due to the tuition support.

Box 8.6. Sarah

Sarah was an applicant from a state funded, non-selective, secondary school. Her mother was a GP and through this she felt she had a good insight into the medical profession. However, she also felt that this might disadvantage her due to it making her ineligible for work experience and widening participation schemes. As she was domiciled in Scotland, she had the resource of tuition fee support. Consequently, she only considered Scottish medical schools. She wanted to attend a medical school with a 'community feel', that was 'patient oriented' with early clinical experience. She considered the five Scottish medical schools and ruled one out based on the course structure.

Ross ruled out two Scottish medical schools based on course style; one for having a PBL dominant course and the other for only having a pre-clinical course. As he perceived himself to have good levels of educational, social, and economic capital, he used his fourth choice for a highly competitive prestigious medical school in England. He felt his likelihood of getting in here was not extremely high but was

confident enough in his three Scottish choices that he would get offers. Ultimately, he was offered places at two of his Scottish medical school choices.

Box 8.7. Ross

Ross was an applicant from a state funded, non-selective secondary school. He described his school as a 'good school, but not well known'. He felt he had a 'better than average' UCAT and that his sports experience was a resource. He wanted to apply to an 'integrated course', with a good reputation, and explicitly stated he was 'not bothered by distance'. He applied to three Scottish medical schools, choosing not to apply to the other two based on their course styles. He then applied to one highly prestigious English medical school because he 'had extra space'.

8.4 Exhaustive comparison of entry requirements (n=8)

This type of strategy was similar to playing to strengths, in that participants more actively considered the selection criteria of different medical schools rather than selecting based only on their priorities. In this type of strategy participants conducted exhaustive comparisons of the entry requirements of different medical schools. This approach was typically used by participants who had specific constraints in their educational capital that meant they only met the entry requirements of few medical schools. Examples of these constraints included those with fewer than the required number of GCSEs (Andrei), those without biology A-Level (Lewis), those who had not achieved the required A-Level grades (Hannah) or had resat A-Levels (Grace), graduates who had low degree classification (Emma) or non-science degrees (Geon), immigrants with no A-Levels (Sofia) or a mature student with fewer than the required A levels (James).

Many of these participants' overriding priority was simply to get into medical school. While they all had preferences for the types of medical schools or locations they would like to study in, they considered their constraints to be so significant that they had to forego these and apply to the institutions that they determined would consider their applications. For these participants there were often only four (the maximum an applicant can apply to) or fewer institutions who would realistically consider their applications. As such they had little 'choice'. In order to identify which medical schools would consider them, in spite of their specific educational capital constraints, some of them contacted every single medical school in the UK to discuss their individual circumstances.

With very little choice, these participants sought to maximise their chances of admission to medical school by seeking schools at which the entry requirements were aligned to what they were able to offer. As can be seen in the example of Andrei (Box 8.8) this sometimes included individuals who had very high educational capital in general but had fallen short in one area. Due to the admissions procedures, some individuals who had high academic attainment in general, but lacked certain specific requirements, felt significantly constrained in their choices.

Box 8.8. Andrei

Andrei immigrated from Europe during secondary school and was only permitted to study five GCSEs by his school. He wanted to attend a medical school that has a traditional course structure and plentiful research opportunities. He was not successful in his first application so reapplied. In his second application he rang up every medical school to enquire about whether they would consider him based on his academic achievements. Despite now having his A levels (achieving A*A*A*A) only six medical schools were prepared to consider his application. He chose four from these six based on their course structure.

While many of the participants adopting this type of strategy were from non-traditional backgrounds, either low socioeconomic groups or recent immigrants, this was not always the case. Geon (Box 8.9) came from a traditional background but, due to coming to medicine later in life, found his choices constrained by not having science A-Levels and having a non-science first degree.

Box 8.9 Geon

Geon was a mature student, from a wealthy background, who attended an extremely prestigious boarding school as an international student before reading economics at the University of Cambridge. After several years in the financial sector, he decided to pursue a career in medicine. Due to having studied a non-science degree and not having studied A-Level chemistry he met the entry requirements of very few medical schools. He applied to four medical schools that would consider him based on GAMSAT performance. After receiving offers from all four he constructed a list of pros and cons for each school and ultimately chose based on the geographical area of the medical school.

Participants using this type of strategy generally had comparatively rational approaches to choice. They sought out as much information as possible about every programme in order to identify which they would be eligible for. This enabled them to determine which choices were likely to maximise their utility. This was the primary determinant of their choices typically followed by selecting those that had the attributes they desired.

Table 8.2. Strategies for exhaustively comparing entry requirements.

Strategy	When / why employed
Apply to universities using GAMSAT	Graduate entrants who had a non-science degree (Geon) or did not meet the classification requirements for their first degree (Emma).
Contact every medical school to enquire about eligibility	When had significant specific deficit in educational capital (Andrei, Grace, Hannah, James).
Made a list of all medical schools with entry requirements	When qualification subjects may not align with the majority of schools' entry requirements (Lewis).

8.5 Contextual admissions (n=7)

The least frequently described type of strategy was applying exclusively or predominantly to gateway programmes or medical schools that offered contextual admissions. This type of strategy was only available to applicants who met specific contextual criteria for the individual medical schools. As discussed in Chapter 2, these programmes are designed to widen access to medical schools. They are targeted at applicants from lower socioeconomic or other disadvantaged backgrounds in order to redress inequalities they may have experienced. The eligibility criteria for these programmes are designed to reflect this.

Considering the number of participants who were participating in widening participation schemes that have similar eligibility criteria to gateway programmes, rather few participants discussed applying for gateway programmes or courses with contextual admission procedures. This may reflect a lack of awareness of this route to entry. Indeed, Katie and Matthew's accounts suggest that applicants are generally

unaware of these routes into medical school. They suggest that medical schools do not sufficiently advertise these options, and that it was only 'by chance' that they came across them.

> *"I saw it on the website by chance. But if I'd not been looking one night like bored, then I don't think I would have known. A lot of the medical schools… A lot of them do hide that they do widening participation. Not hide it, but its deep within the application bits, it's not at the top of the thing, where they do A level entry, uni entry, they say what you need. And then at the bottom of the page, if you scroll right down to the bottom, it'll say widening participation…'*
>
> (Katie, more traditional medical student at a cluster 6 medical school)

No participants in this study described applying to four gateway courses; the maximum number of these courses applied to within this sample was two. This appears to be for two main reasons. Firstly, for those that were aware of gateway courses or contextual admissions, they appear to only be aware of these routes at few medical schools, believing these are the only ones that offer these. For example, Katie was aware of two six-year gateway programmes and one five-year programme that offered contextual admissions. Similarly, Georgia was aware of contextual admissions at two programmes: the two most proximal to her. She had heard of these through her school.

Secondly, some participants believed that gateway programmes were likely to be more competitive than standard entry programmes. While they appreciated that the academic grade requirements were likely to be lower than for standard entry medical courses, they recognised that the number of places available on these courses were also fewer and consequently the ratio of applicants to places may be significantly higher than for standard entry courses.

> *"Even though you get in with lower grade boundaries for the Widening Access course the interview side of things is a lot harder than the other […] I think it's the ratio of people that applied to people get in"*
>
> (Matthew, non-traditional medical student at a cluster 3 medical school)

Yasmine and Matthew applied to two and three gateway courses respectively, on the advice of their teachers. Yasmine did not make other choices and Matthew also applied to 'non-medical' options as reserves for if he was not successful in his medical applications.

Box 8.10. Matthew

Matthew was a first-year medical student on a gateway programme. He attended a state funded, non-selective, secondary school and then a further education college. His college tutors told him his GCSE grades were not high enough to apply to medicine. However, when they realised which secondary school he attended, they advised him he may be eligible to apply to a gateway programme. He applied to three gateway programmes, but on the advice of his teachers he applied to two non-medicine 'reserve' options. He received offers for two of the gateway programmes.

As alluded to earlier, what is most striking with regards to this strategy is the number of participants who were seemingly eligible for these programmes but did not avail themselves of these opportunities. It is unclear if this is because they were not aware of them, if they elected not to because of competition ratios, or whether they prioritised other factors that led to them choosing different medical schools. For example, Jack was part of a widening participation scheme that has similar eligibility criteria to many gateway programmes or contextual admission procedures. He is therefore likely to be eligible for at least some of these, but did not describe applying to any.

8.6 Discussion

When choosing which medical schools to apply to, participants in this study adopted strategies that can be categorised into five types: maximising priorities, playing to strengths, the Scottish approach, exhaustive comparison of entry requirements, and contextual admissions. The strategy each participant adopted appeared to depend on their perceptions of their resources and constraints in different forms of capital. Many who had specific strengths in one form of capital used a strategy that made the most of this: some eligible for contextual admissions applied to gateway course and courses where they met the contextual criteria; all those domiciled in Scotland and eligible for tuition fee support applied to Scottish medical schools; those with another strength in specific types of intellectual capital applied to schools who they perceived weigh this more heavily in their offer making processes. Similarly, those who were

specifically constrained by low levels of one or more form of capital used strategies that aimed to mitigate these constraints: those with specific low academic attainment undertook exhaustive comparisons of entry requirements in order to inform choice; those with less significant constraints played to their strengths by avoiding medical schools that they perceived weighed the area in which they were constrained more heavily in their decision processes. Applicants who either had good levels of all forms of capital or had limited insight into their constraints, adopted a strategy of maximising their priorities. Table 8.3 summarises the linkage between resources, constraints, and type of strategy adopted.

Table 8.3. Linkage between resources, constraints, and strategies.

Perceived resources	Perceived constraints	Type
Good	None, or limited insight	Maximise priorities
-	Specific significant constraint	Exhaustive comparison of entry requirements
Specific strong resource	Generally mild constraint / specific constraint	Playing to strengths
Eligible for contextual admissions	Lower educational and social capital	Contextual admissions
Tuition fee support	-	The Scottish approach

The most frequently employed strategy in this study was maximising priorities. While this meets the criterion of utility maximisation, it may not necessarily be the most prudent strategy to use in all circumstances. Economic choice theories have been developed for consumer settings in which individuals have a certain budget and are seeking to maximise the utility they receive from goods purchased. This relies on two further assumptions. Firstly, that they are aware of the cost of the goods. Secondly, that if they offer a vendor the specified price that they will receive the goods in exchange for that sum. Neither of these assumptions are met in the context of higher education. For the former assumption, the 'cost' relates not only to financial capital but rather to include all of the other forms of capital discussed in Chapter 7. These forms of capital are often more difficult to quantify and communicate transparently and so applicants may not have accurate insights into the capital required for entry to a specific medical school, nor in to the levels of capital they possess. This assumption fails to account for the fact that demand for medical school places significantly

outstrips their limited supply. Applicants are also in competition with others whose capital is also mostly unknown or into which they have relatively more or less insight, depending on their resources. For example, many may rely on their school teachers for guidance on how competitive their applications may be. However, it is questionable how well informed these teachers are to offer this guidance, especially at schools that do not have experience of supporting many pupils to apply to medical school.

Many participants in this study conveyed the sentiment that they would rather go to any medical school than not be able to go to medical school at all. Their strategies should therefore be averse to the risk of not receiving any offers. Most of the other types of strategy aimed to minimise this risk. If the primary objective for these participants was to get in to medical school, they were prepared to forego some of their priorities in exchange for a perceived increase in likelihood of offer. The exception to this is the Scottish approach. Here participants were seeking to utilise a considerable financial resource, however it did constrain the options they considered.

It was also notable that several participants who adopted a strategy of maximising priorities appeared to be eligible for gateway courses or contextual admissions. For these participants, who may have been constrained in various forms of capital, they may have increased their likelihood of receiving (and meeting) an offer for study had they adopted the strategy of contextual admissions.

It can be argued that the choice strategies of many of these participants were boundedly rational (see Chapter 3). That is, the rationality of their choice processes was bounded by two factors: i) limited information on all the available choices; ii) limited ability to process all of the information about potential choices (144). These two factors bound the rationality of even reasonably simple consumer choice processes. Choosing medical schools to apply to is undeniably complicated; in order to have complete preferences, one firstly needs to be aware of all the potential options. While this wasn't explicitly explored in this study, a subsequent survey of applicants has demonstrated this is not the case (158). The list of potential higher education options, of which an applicant is aware, is described as an 'awareness set' (156). If applicants are not aware of all of the potential options then they will not be able to make the most informed choice. Further, medical school admissions criteria and procedures vary significantly between different medical schools in the UK. Understanding these and considering which are most favourable for one's application would be a prerequisite for any economically rational choice process. Participants in this study, however, were rarely fully informed regarding all these details. In particular,

participants choosing to maximise their priorities, did not appear to consider the implications this strategy would have on their potential success. It could be argued that these participants were satisficing in choosing satisfactory choices that met their priorities in terms of medical school attributes. This does not however account for likelihood of offer or propensity for risk.

Previous research on higher education choice has been dominated by the brand elimination framework (77, 159, 169). In this model applicants make decisions based predominantly on their preferences. The findings from this study suggest that this model oversimplifies the choice making process and fails to take account of the way in which perceived levels of capital influence choice making processes. Participants in this study employ more strategic approaches to constructing their choice sets. However, this relies on them having accurate insights in to the resources and constraints of their application based on the various forms of capital they possess.

Conclusion

In this chapter, I have examined how applicants to medical schools weight up their priorities, resources, and constraints when making their choices. By constructing a typology of five types of strategy, I have highlighted the different ways applicants approach this complex decision-making process. I have analysed these types in relation to various theories of choice behaviour, demonstrating how applicants' strategies align with or diverge from existing theoretical frameworks. My findings show that medical school applicants do not always simply make rational, optimising decisions; rather, their choices are shaped by a range of social, economic, and institutional factors. This analysis provides a deeper understanding of the diversity in applicant choice behaviour and challenges simplified models of decision-making. In the next chapter, I will discuss the broader implications of my findings, compare them with existing literature, evaluate the strengths and limitations of my study, and outline key recommendations for policy, practice, and future research.

Chapter 9. Discussion

This thesis aimed to explore how applicants from different socioeconomic backgrounds choose which medical schools to apply to. I have conducted a large national qualitative interview study of applicants and recent entrants to medial schools and used theory informed analyses to shed light on this previously under explored area. With 46 medical schools, applicants can make 163,485 possible combinations when selecting their four choices[5]. Given the significant variation between different medical schools this decision-making process is inherently complex.

Participants described seven main priorities they considered when evaluating medical schools: course style, proximity to home, prestige, medical school culture, geographical areas, university resources, and fitting in. I found that there are many similarities in what applicants from different socioeconomic groups desire when considering medical schools. Prestige was nearly universally attractive, and participants conceptualised this in a range of ways (reputation, league tables, research activity and associated teaching hospitals, and membership of the Russell Group). Participants also expressed strong preferences regarding course types, although these preferences varied. However, despite prestige and course type being the most desirable attributes, they were not always reflected in the choices participants made. This seems to be because some applicants, particularly those from non-traditional backgrounds, prioritised other factors. For instance, they might focus on maximising their chances of acceptance or choosing schools closer to home to reduce travel and accommodation costs. This is primarily where differences between socioeconomic groups were seen.

Participants evaluated their perceived resources and constraints when considering which medical schools to apply to. The qualitative data provided by participants were analysed using a model of four types of capital: economic, intellectual, social, and positive psychological. Participants described their academic attainment, admissions test performance, and work experience (intellectual capital) as being the most influential resources they drew upon when choosing to which medical schools to apply. Few participants considered positive psychological capital to be a resource.

[5] The binomial coefficient of selecting 4 choices from 46. In actuality it is greater than this as many medical schools offer more than one course that could be considered (i.e. standard entry five-year programme, gateway six-year programme.

Performance on UCAT was a particularly important consideration and formed the basis of the strategies for several participants. Applicants who perceived they had performed relatively poorly on the UCAT described choosing to apply to schools that used BMAT or applying to schools that weighted UCAT score minimally. Interestingly, applicants who had performed particularly well on UCAT did not appear to consider this a particular resource. Perhaps related to this, applicants rarely seemed to distinguish between the ways in which different medical schools used UCAT scores in their selection procedures.

Participants employed a range of strategies when choosing which medical schools to apply to. Many participants described choosing solely based on the medical school attributes they found desirable. While this serves the aim of utility maximisation, it may not be the most strategic choice approach, particularly for applicants with less educational and social capital. Others who were conscious of their low capital conducted more exhaustive searches and comparisons of the entry requirements for different medical schools. Sometimes this led them to realise they met the criteria of very few medical schools leaving them with restricted choice.

9.1 Should I stay or should I go?

Participants from lower socioeconomic backgrounds more frequently described how their economic capital constrained their choices, often prioritising proximity to home when selecting medical schools. For some, this was motivated by a necessity to live at home, while others aimed to reduce costs associated with traveling home for weekends and holidays. Previous higher education research suggests that proximity to home is particularly important for those from lower socioeconomic backgrounds, typically driven by a fear of accumulating debt (201). However, this concern did not appear to be prevalent among participants in this study. Perhaps this is because medical graduates typically have relatively strong earning potential. Instead, participants were more concerned with managing living costs during their undergraduate studies. London was an exception: some participants explicitly chose not to apply to London medical schools, as they perceived the city to be more expensive. Although a higher student loan is available for those studying in London, these participants preferred to avoid incurring additional debt.

Proximity to home has not been described as a key determinant of choice in previous research on medical school choice (8, 79). This may be explained by the fact that these studies were conducted when the rates of participation in medical school of those from lower socioeconomic backgrounds were very low (and therefore proximity

was less of a concern). Research in to higher education choice more broadly has shown that working-class students are indeed often limited by geographical proximity while those from higher socioeconomic backgrounds are typically not (198). A potential consequence of prioritising proximity to home is that it may result in applications to older, more prestigious universities, depending on an applicant's home location (169). In this study, there were examples of economically constrained participants from London who applied to the closest four London medical schools in order to remain at home. These medical schools have high competition ratios and so may not have been the most strategic choice in terms of maximising their chances of receiving an offer.

Without the constraint of needing to study close to home, applicants from higher socioeconomic backgrounds were free to prioritise other medical school attributes and to pursue the 'university experience' of moving away from their family home. This manifests most obviously in considering geographical area. While many participants discussed preferences for the types of areas they would like to study (e.g. in a big city, by the coast, etc.) those from higher socioeconomic backgrounds were able to afford this a higher priority in their decision-making processes.

Applicants domiciled in Scotland enjoyed the resource of receiving free tuition at Scottish medical schools. This resulted in them employing a different choice process whereby they chose which of the five Scottish medical schools to not apply to rather than which four UK medical schools to apply to. Previous research has demonstrated than over 90% of Scottish medical students had applied to three or four Scottish schools (80).

9.2 Prestige

Previous research has consistently highlighted the role of institutional prestige as a key factor in higher education choice (7). This was reflected in this study with most participants describing being attracted to prestige. Three main reasons were cited; that prestigious institutions would have the highest quality teaching; that attending a prestigious institution would improve their job prospects; that attending a prestigious institution is important for them to fulfil their full potential.

My findings reinforce the notion that prestige remains a dominant consideration across diverse applicant groups. However, the findings also underscore important variations in how applicants from different socioeconomic backgrounds weigh prestige against other priorities. While the appeal of prestigious institutions was

almost universal, participants from lower socioeconomic backgrounds were more likely to describe foregoing prestige in order to prioritise other factors when formulating their choices, notably, being closer to home or being more likely to receive an offer in the highly competitive admission process for medicine. Participants from lower socioeconomic backgrounds had fewer resources and greater constraints and therefore weighed these against their priorities when making choices. Figure 9.1 proposes a hierarchy of needs, adapted from Maslow (202) that applicants need to fulfil when choosing and applying to medical schools.

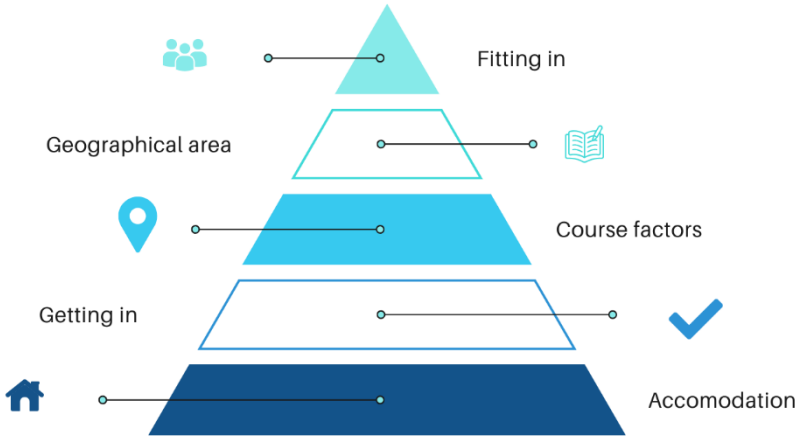

Figure 9.1. A proposed applicants' hierarchy of needs

Drawing on the principles of Maslow, applicants' decisions about which medical schools to apply to can be viewed through a 'hierarchy of needs', arranged from foundational to more aspirational concerns. For many participants from lower socioeconomic backgrounds, the most fundamental issue, akin to physiological needs, is ensuring affordable living and covering basic expenses like food and daily necessities while studying. Several described wanting to study close to home so they could continue living with their parents, perceiving that they lacked the financial resources not only for rent but also for ongoing costs such as food, bills, and commuting. For these applicants, even being admitted to medical school may feel secondary if they cannot manage the cost of living once enrolled. By contrast, those from higher socioeconomic backgrounds appeared generally less concerned with this and did not prioritise proximity to home to the same extent. This allows them more freedom to consider other factors, such as course style or prestige.

Once applicants are confident they could feasibly afford to attend a medical school, the next priority is successfully navigating the admissions process. If they perceive themselves as unlikely to receive or meet an offer - whether due to lower predicted or attained grades, poorer admissions test performance, less voluntary or work

experience, or less guidance - attributes like course structure and location become irrelevant. Applicants from lower socioeconomic groups, who often have lower educational and social capital, are less likely to receive and meet offers. Conversely, students from private schools may feel confident they will do so, effectively taking this layer of need for granted.

If applicants can meet their foundational financial needs and feel they have a solid chance of admission then they are afforded choice based on course-related factors: prestige, course style, and institutional culture. Although each applicant prioritises these differently, prestige and course format generally emerge as more influential than culture. At this stage, applicants begin to weigh the nuances of different medical schools such as PBL vs. traditional curricula, early clinical experience, cadaveric dissection, reputation, and league table rankings.

Next is the geographical area. While some prioritised this over the course related factors, this was typically described as less important and considered mainly after applicants had narrowed their choice sets down through prioritising on other factors. Factors like city size, local culture, and opportunities for recreational activities are considered here.

Finally, at the top of this adapted hierarchy is the perceived ability to “fit in” socially. While many discussed this, it was seldom afforded a high priority. Those that reported that they may not fit in due to being from a minority background (either with regards to ethnicity or social class) described fitting in as a higher priority. Yet, even in these cases it didn’t often appear to have a significant bearing on their choice process, suggesting this is a ‘luxury’ consideration that becomes relevant only if financial viability, admission prospects, and course preference are already satisfied.

Mapping these layers reveals how individuals from higher socioeconomic backgrounds with strong educational capital and majority ethnic status effectively ‘skip’ the most fundamental concerns. They focus instead on course features, location, and overall student experience. In contrast, applicants with lower levels of capital must prioritise affordability and likelihood of admission.

It might be tempting to conclude that widening participation efforts should focus solely on the bottom layers of this hierarchy. This is where much work to do date has focused; for example, the provision of scholarships, widening participation schemes, and contextual admissions (203). Yet concentrating only on foundational needs risks overlooking the equally important aspirations of non-traditional applicants. A truly meritocratic approach would ensure that all students, regardless of background, can

afford to attend medical school, have a fair chance of receiving and meeting offers, and then choose an institution that aligns with their values and learning preferences. Moreover, no applicant should fear exclusion based on socioeconomic status, ethnicity, or any other personal characteristic. Achieving this vision requires not just improving access to resources and financial support, but also fostering inclusive medical schools where all students may feel they belong.

9.3 Approaches to choice

Much of the existing research on higher education choice has focused on the brand elimination framework, wherein applicants become aware of a range of institutions (their 'awareness set'), select a smaller group they find appealing (their 'consideration set'), and then evaluate these institutions based on the attributes they deem important (77, 159, 169). While this model offers a useful starting point, the findings from this study suggest it may oversimplify the decision-making process for prospective medical applicants.

Medical school applicants must do more than merely identify their preferences; they must also assess how the forms of capital they possess (i.e. economic, social, intellectual, or positive-psychological) will affect their chances of securing an offer. Applicants with lower levels of these various forms of capital may need to be more strategic in their choices. For instance, they might choose medical schools they perceived they are more likely to be admitted to or that are located closer to their family home to minimise cost. Conversely, applicants with higher levels of capital have the flexibility to pursue more competitive or distant programs without as much concern over expenses or networks of support. This offers them the privilege of choice.

Moreover, the process of selecting which medical schools to apply to is more complex than typical university applications, where entry requirements can vary widely, allowing for clear 'safety' options. In medical school admissions, academic entry requirements are uniformly high, meaning it can be difficult to identify a less competitive fallback choice. Additionally, admissions processes are complicated and require considerable preparation, guidance, and resources. As a result, academic achievements alone are insufficient; other factors such as work experience, knowledge about admissions processes, and social connections can play pivotal roles.

Crucially, the unequal distribution of knowledge about how medical school admissions work further exacerbates existing socioeconomic disparities. Applicants from less privileged backgrounds may have limited or inaccurate information, relying on social comparisons within their immediate peer group where few, if any, classmates aspire to medicine. Such comparisons may lead them to overestimate their competitiveness if there is no benchmark of higher-performing peers. By contrast, applicants from more affluent backgrounds often have access to informed guidance, professional networks, and detailed coaching, significantly enhancing their ability to prepare competitive applications.

Together, these findings suggest that the brand elimination framework does not fully capture the nuanced interplay of capital, strategy, and complex admissions criteria inherent in medical school applications.

9.4 Widening participation schemes mitigate against low capital

Participants from lower socioeconomic backgrounds described how engaging in widening participation schemes helped to compensate for their comparatively low levels of social capital. These programmes, often run by universities, student societies, or charities, provided structured support that many may otherwise be unable to access. Participants noted that through these schemes, they gained clearer insights into admissions procedures. This may compensate for having less insights available through support at their schools. Support and advise about personal statements, interview preparation, and aptitude tests, helped them to prepare more informed applications.

A key benefit of these initiatives was the facilitation of work experience opportunities. Some participants described that, without the assistance of widening participation programmes, they would have struggled to secure work experience placements in clinical settings. In some instances, participants noted that their schools or families did not have the professional networks necessary to help them arrange work shadowing; thus, these structured schemes filled a critical gap. By experiencing different healthcare environments participants gained first-hand insights into the realities of a medical career.

Despite positive experiences on widening participation schemes, some participants from lower socioeconomic backgrounds expressed reticence about applying for gateway programmes designed specifically to widen access for disadvantaged

applicants. They believed these programmes were even more competitive than standard entry courses. While gateway courses might offer additional support over a longer study duration and reduced academic entry requirements, participants recognised that the number of places available on these courses are typically smaller and so the ratio of applications to places may sometimes be considerably higher.

9.5 Reverse disadvantage

Many participants were cognisant of their socioeconomic backgrounds and how these might influence the way their applications were perceived. Several participants from more traditional backgrounds felt they were viewed less favourably because of their privileged status, suspecting that medical schools were keen to recruit applicants from lower socioeconomic backgrounds instead. They described this dynamic as a "black mark" against them, indicating a possible sense of 'reverse disadvantage' among applicants from traditionally well-represented groups. Notably, only one participant from a traditional background recognised that his social capital —in particular, attending a high-performing school and having professional networks— conferred significant advantages in the admissions process. He openly acknowledged that without these resources, applying to medical school would have been more challenging. Applicants who believe they are effectively penalised for their privilege may come to resent peers from lower socioeconomic backgrounds, perceiving them as having an easier route into medical school. Such sentiments could have lasting consequences for peer dynamics and collegiality within medical schools (204).

Conversely, many participants from lower socioeconomic backgrounds expressed a desire to be admitted based on their own merits rather than through perceived "handouts" from medical schools. While they understood that widening participation initiatives targeted those from underrepresented groups, they often interpreted these measures as fulfilling government or institutional quotas rather than redressing deeper structural inequalities. This novel finding raises important questions about how well the purpose of widening participation is communicated. The intention is typically to remedy long-standing inequities in educational opportunities, yet many of these participants did not appear to view it this way.

Together, these observations highlight a critical tension: on the one hand, some traditionally advantaged applicants feel unfairly disadvantaged by policies aiming to widen access; on the other, many from lower socioeconomic backgrounds do not fully appreciate that such initiatives are designed to counter systemic barriers they are

likely to have faced. There have long been concerns regarding reverse discrimination in the USA in the context of affirmative action (205) and recent research in the UK has shown that some medical (2) and dental (206) academics fear that widening participation policies may be unfair and lead to a lowering of standards. This is the first UK study in which applicants have expressed these views.

Future research should explore these perceptions in greater detail, focusing especially on contextual admissions practices and applicants' attitudes toward them. Medical schools and the Medical Schools Council could benefit from more transparent, proactive communication about the rationale behind widening participation, emphasising how it serves to level the playing field rather than confer unearned benefits. Ensuring that all applicants—both those who are eligible for these programs and those who are not—clearly understand the intent behind widening participation may help reduce misunderstandings, mitigate resentment, and foster a more inclusive environment in medical schools.

9.6 Challenging the aspirational deficit narrative

As outlined in Chapter 1, previous research has suggested that individuals from lower socioeconomic backgrounds have historically felt unsuited to careers in medicine. While this study has only sampled from those that had applied to medical schools or were seriously considering doing so, the findings demonstrate that amongst this population there was no shortage of aspiration for a medical career. Instead, the most significant obstacle appeared to be the complexity of navigating admissions procedures necessary to secure and meet offers.

Previous studies have often suggested that individuals from lower socioeconomic backgrounds lack the confidence or aspiration to pursue a medical career (42). My findings suggest that this is no longer the case. This may be due to the significant efforts that have been made to raise aspirations amongst these groups. What remains an issue is an inability to translate these aspirations into successful applications. The medical school application process in the UK is complex with many different medical schools using different tools with different emphases. Applicants from lower socioeconomic backgrounds are attracted to and aspire to attend prestigious medical schools but may have to satisfice by prioritising other factors or their likelihood of acceptance. Alternatively, those from lower socioeconomic backgrounds may lack the social and intellectual capital to make choices that are likely to maximise their chances.

This study contributes to the evolving understanding of socioeconomic disparities in medical school admissions by reframing the issue from one as 'aspirational deficit' to one of capital deficit and satisficing. This re-framing has important implications for research, policy, and practice, emphasising the need for further information and guidance to reduce the socioeconomic inequities that persist in medical education.

9.7 Critical reflection on the use and usefulness of theoretical frameworks

The use of theory has become increasingly prevalent in health professions education research in recent years. Scholars have argued that the explicit use of theory is essential in qualitative research, as it enables researchers to move beyond descriptive accounts toward deeper interpretation of underlying processes (207). Johnson et al. liken theories to lenses through which researchers view the world, noting that different theoretical lenses reveal different dimensions of a phenomenon (208). Selecting the most appropriate theory is therefore a crucial aspect of designing and conducting research (208).

Varpio et al. (199) outline three primary ways in which theory can be used in qualitative research:

- *Fully inductive theory development:* theory is not used to inform the design or analysis; rather, the output of the research is the development of new theory.
- *Fully theory-informed inductive design:* theory is integrated at all stages of the study, from design through to analysis, and may lead to refinement or extension of existing theory.
- *Theory-informing inductive data analysis:* theory is selected at the analysis stage and used as a framework to support interpretation of the data.

In addition, Bradbury-Jones *et al.* propose a typology describing the visibility of theory within qualitative research outputs (209). Regardless of when or how theory is used in a study, this typology categorises how clearly theoretical engagement is communicated in writing. The five levels are:

1. Seemingly absent
2. Implied
3. Partially applied
4. Retrospectively applied
5. Consistently applied

In this thesis, I adopted a theory-informing inductive data analysis approach. I did not design the interview schedule with a specific theoretical framework in mind; however, during analysis, I selected and applied theories to help interpret and explain patterns in the data. As I will outline, my use of theory evolved over time, with different theories informing different stages of the analysis.

Specifically, I drew on two key groups of theory: theories of choice, drawn from economics, consumer decision-making, and higher education choice models; and theories of capital, namely Luthans' framework, which includes economic, human (intellectual), social, and positive psychological capital (176, 177). The latter builds on Bourdieu's conceptualisation of economic and social capital (175). I did not apply these frameworks in parallel but rather used them sequentially. Each offered different insights into how medical school applicants navigated and experienced the application process.

In the following sections, I critically reflect on the theories I selected, how I used them, and how visible they are within this thesis. I also consider how these frameworks shaped my analysis and contributed to the development of an emerging theoretical typology in Chapter 8.

Theories of choice

I explored applicants' choice behaviour through a theoretical lens informed by economics (including behavioural economics) and consumer behaviour, particularly models of higher education choice. I selected these theories because I was interested in how individual applicants made decisions between different medical programmes, drawing a comparison with how consumers make decisions about products and services.

Early in the research process, it became clear that applicants' behaviour did not align with the assumptions of rational choice theory. This prompted me to read more widely about other theories of choice. These were helpful in understanding the cognitive processes that individuals go through when making choice decisions.

Through analysing the transcripts, I identified patterns consistent with the Consumer Decision Process (CDP) model, in which participants described evaluating alternatives based on available information. However, this evaluation was typically restricted to only a subset of all UK medical schools (consistent with the concept of a consideration set, as described in brand elimination framework). Notably, what participants said they valued in a medical school did not always match the schools they ultimately applied to. This was driven by concerns about likelihood of success at

their most desired medical schools. This was shaped by their perceptions of the admissions criteria, competition, and their own application strength.

These choice theories helped me make sense of how participants framed and enacted their decisions, but they also revealed limitations. These theories were largely individualistic and psychological, focusing on internal reasoning and underemphasising the role of structural constraints, social positioning, and institutional priorities that shape the range of choices available. They offered limited explanatory power for understanding why some applicants felt constrained in their choices, or why their consideration sets were narrower or more risk-averse.

As McOwen *et al.* note, qualitative research often evolves as the study progresses (210). As my analysis deepened, I realised that the theories of choice, while helpful, did not fully explain applicants' choice behaviour. I needed a framework that could account for the unequal distribution of resources and opportunities that participants described. This led me to supplement my analysis with sociological theories of capital, which helped explain why applicants from different socioeconomic backgrounds experienced different degrees of constraint when choosing where to apply.

Theories of capital

In considering sociological theories, I drew on theories of capital. I felt Bourdieu's theory of capital including economic and social capital was useful (175). But was drawn to the additional forms of capital that were included in Luthans' framework: human capital and positive psychological capital (176, 177). From reading the transcripts, I felt that human capital, in terms of the experience and educational attainment participants had, was particularly pertinent to their decision processes. I also wondered whether positive psychological capital may be a factor. Those from lower socioeconomic backgrounds are often described as needing to be more resilient or have more grit in order to succeed in spite of their constraints. I felt this framework would be a helpful meso-level theory that might explain how choice behaviour varied between socioeconomic groups because of unequal levels of capital.

My use of this framework was indeed helpful. It helped me to identify many ways in which participants described their resources and constrains differentially and the influence their socioeconomic backgrounds had on these. However, my use of Bourdieu was partial. While I engaged with forms of capital, I did not fully operationalise two other core concepts in Bourdieu's sociology: habitus and field. This was partly because I adopted a theory-informing inductive approach and selected my

theoretical tools during analysis, rather than designing the study around a comprehensive Bourdieusian framework. As such, my interview questions were not designed to elicit participants' embodied dispositions which would be central to understanding habitus. Moreover, my focus was primarily on the resources that participants perceived they could mobilise when applying to medical school. This naturally aligned with the concept of capital, and was further supported by Luthans' expanded framework. In contrast, habitus, which refers to internalised ways of being and perceiving the world, was less immediately visible in participants' accounts and more difficult to infer with confidence from the transcripts. A more comprehensive application of Bourdieusian theory would have explored how applicants' dispositions (habitus), shaped by their upbringing and prior educational experiences, influenced their aspirations, confidence, and perceptions of fit with particular medical schools. Similarly, I could have paid more attention to how the medical school admissions process constitutes a field with its own rules and logics, in which different forms of capital are recognised and valued differently.

It is also evident that there was very little discussion within transcripts of positive psychological capital and the influence of this on choices. This may be because I decided to include this aspect of the framework after data collection had been completed and so had not explicitly prompted for this within the interviews. Using a more fully theory-informed design may have yielded further discussion of this form of capital. Alternatively, it may be because participants did not perceive this to be significant factor in this application processes. The lack of discussion within this form of capital is an interesting finding in itself.

Combining the two frameworks

While each theoretical strand had limitations, I believe the decision to use them both strengthened the analytical depth of the study. Theories of choice illuminated how applicants made decisions, while theories of capital explained why some applicants were afforded a broader range of choices, due to unequal distribution of various forms of capital.

Overall, the combined theoretical approach provided a richer, more multi-dimensional account of medical school choice than either framework alone and is a novel feature of this thesis. It highlighted both the agency of applicants in navigating medical school admissions and the constraints imposed by social, economic, and institutional structures.

Emerging theoretical contribution

Although my main aim in this thesis was to empirically explore how applicants from different socioeconomic backgrounds choose which medical schools to apply to, I also developed an embryonic theoretical contribution, presented in Chapter 8. This took the form of a typology of applicant approaches to medical school choice.

In this typology, I mapped how applicants identified the attributes they valued in a medical school, assessed the resources available to them (across all four forms of capital), and made strategic decisions based on the interplay between these. The typology captures the variety of approaches applicants took, from those who with no constraints (or who were unaware of their constraints) that applied to their four most desirable schools, to those that were cognisant of their constraints and applied tactically and cautiously. These strategies reflected both individual agency and external constraints.

I believe this typology offers a useful framework for understanding the interplay between what applicants want, what they believe is possible, and how they act within that space. Although still in an early stage, this model could be developed further through empirical testing, for example, using survey data to explore the distribution of strategy types across different applicant groups.

In this way, my thesis offers a modest but original theoretical contribution. It moves toward a more integrated understanding of medical school choice, one that takes seriously the resources, constraints, perceptions, and strategies that applicants bring to a competitive and unequal system like medical school admissions.

9.8 Strengths and limitations

This study is the first national qualitative interview study examining medical school choice. The qualitative nature of the study allowed me to explore in-depth participants' personal experiences, motivations, and decision-making processes and provided rich, nuanced insights that quantitative methods would have been unable to capture. I employed semi-structured interviews to offer flexibility, allowing participants to elaborate on their thoughts while ensuring key topics were covered. This combination of flexibility and structure facilitated both depth and breadth in understanding the factors influencing medical school choice.

A key strength of the study is its stratified purposive sampling approach, which ensures diversity among participants by including individuals from varying social backgrounds and stages in the application process. The sample includes applicants

at different stages, including current medical students (who have successfully applied) and those who have been unsuccessful in previous application cycles. Including participants at the application stage overcomes the limitations inherent in much of the existing research on medical school choice. The sample size is large for qualitative research, and sufficient to allow for meaningful comparisons across different groups (e.g., traditional vs. non-traditional applicants) (185). This diversity provides a comprehensive understanding of the experiences and factors influencing applicants' decisions. The multi-centre design further enriched the study by considering diverse institutional contexts, which enhances the external validity of the findings within the UK medical school system.

The data reported in this thesis were collected in 2018–2019. Since that time, the landscape of medical school admissions in the UK has evolved in several notable ways. Many new medical schools have been established, some with explicit missions to widen participation. The BMAT has been discontinued. Widening participation efforts have expanded significantly including greater provision of outreach activities, gateway programmes, and online offerings that enhance geographical accessibility. While these changes may influence the specific medical schools applicants consider, I believe the underlying approaches to choice identified in this thesis remain relevant. The strategies and decision-making patterns described continue to offer valuable insights into how applicants navigate choice within their socioeconomic constraints and make sense of the application process.

To ensure that applicants from non-traditional backgrounds, who were, by definition, underrepresented in UK medical schools, were included in the study, I deliberately recruited participants through widening participation schemes. I had anticipated that recruiting current medical students through more general channels would yield a sufficient number of participants from more traditional backgrounds. However, only two participants with clearly traditional socioeconomic backgrounds were included in the final sample.

This imbalance may reflect how the study was framed. Because the research focused on how applicants from different socioeconomic backgrounds make choices, and was situated within a widening participation context, some applicants from traditional backgrounds may have felt that the study was not intended for them or may have perceived a risk of being stigmatised. Additionally, I did not collect detailed demographic information at the point of recruitment. I only became aware of participants’ backgrounds during the interviews.

Using an expression of interest form that captured key demographic characteristics in advance could have informed purposive sampling and yielded a more balanced sample across the socioeconomic spectrum. This would have enhanced the comparative potential of the study and strengthened the representativeness of the findings.

I collected a range of personal characteristics data to contextualise participants' backgrounds and explore how these shaped their perceptions and choices. This included whether their parents or siblings were doctors, whether their parents had a university degree (i.e. whether the participant was first in their family to attend university), their ethnicity, and their school type. I also asked for participants' postcodes, from which I derived area-based indicators such as the IMD and POLAR classification. Additional details were gathered during interviews and used to build a more nuanced understanding of participants' social and educational contexts.

These demographic data were instrumental in constructing a spectrum of applicants from more traditional to more non-traditional backgrounds. This classification informed the framework analysis and enabled me to explore patterns and differences between participants from varying socioeconomic groups. There were, however, some additional details that could have been useful to collect systematically. For example, obtaining information on their parents' occupations would have allowed me to assign participants to NS-SEC categories. Collecting school names would have enabled comparisons with school-level attainment data. Asking whether participants had been eligible for free school meals (a common widening participation criterion) could have added another useful indicator of disadvantage.

That said, this was a qualitative study, and the value of increasingly granular categorisations is limited. The real strength of this research lied in its ability to capture the nuance and complexity of how applicants' backgrounds shaped their perceptions, reasoning, and decision-making. These were best explored through in-depth interviews, which provided richer insights than further demographic categorisation alone could offer.

I used framework analysis to support a systematic and transparent approach to data analysis. This method was particularly well suited to the nature and aims of the study. First, it is designed for use with large qualitative datasets, such as the one generated in this research, and provides a structured way to manage and reduce the data while retaining transparency. Second, framework analysis enables researchers to remain closely grounded in participants' accounts, preserving the language and framing used

by participants, and allowing for less abstract interpretation than some other qualitative approaches (188).

Crucially, framework analysis is especially useful when a study includes distinct participant groups and when comparing themes across these groups is of analytical importance (188). This was a central aim of my study: to explore how applicants from different socioeconomic backgrounds experienced and approached medical school choice. The use of a framework matrix allowed me to analyse data both within individual cases and across cases, supporting comparison while preserving contextual detail. Although sometimes perceived as more rigid than other qualitative methods, I found framework analysis to be flexible enough to accommodate inductive coding and theoretical development while maintaining clarity and rigour in how themes were developed.

While I conducted the majority of interviews myself, a small number were carried out by colleagues when I was unavailable. I made this decision pragmatically, prioritising the inclusion of these participants over the risk of missing their perspectives entirely. Although this may have introduced some variation in interviewing style, all interviewers were briefed on the study aims and approach, and used the same interview guide. I do not believe this significantly compromised the quality or consistency of the data.

Involving others in the analysis was a strength of the study. Collaborative analysis enabled multiple interpretations of the data to be explored and enhanced the credibility and reflexivity of the findings. Engaging in discussion with others about how the data were coded and interpreted prompted valuable reflection and helped challenge my assumptions. This process contributed to the development of a more robust and nuanced understanding of the patterns emerging from the data.

I considered Patton's criteria for qualitative research quality (credibility, dependability, confirmability, and transferability) throughout the design and conduct of this study (193). I enhanced credibility by recruiting participants from a range of socioeconomic backgrounds and by conducting long, in-depth interviews that allowed participants to reflect fully on their decision-making processes. I supported dependability and confirmability through careful documentation of analytic decisions, reflexive memos, and regular supervisory input. I found Paton's criteria to be a helpful reference point for reflecting on the quality of the study, thought it was not the only framework I used. I also considered the eight dimensions of quality relevant to health professions education research described by O'Brien, Rees and Palermo (211):framing,

positioning, relevance, ethics, internal coherence, rigour, presentation, and impact. These dimensions were particularly useful in supporting a more holistic assessment of the quality of my thesis. Together, the two frameworks provided a structure for considering the methodological rigour of my research.

Although the interviews were in-depth, they were one-off conversations, and the study did not include prolonged engagement. Extended engagement, for example through serial interviews or audio diaries, could have offered deeper insight into how applicants' priorities shift over time and how decision-making processes evolve. This represents a potential opportunity for future research. However, my sample did include participants at different stages of the decision-making process, which provided some insight into this dynamic. I also chose not to use member checking. While this is sometimes advocated as a quality marker, scholars have cautioned against its use where it may not align with the epistemological stance of the study, or where it may place undue pressure on participants to continue engaging or agree with the researcher's interpretations (212). Given the interpretive nature of my analysis, I concluded that member checking was not appropriate in this context.

While the study benefits from a large and varied sample size, it is important to note that all participants were either applicants or students at UK medical schools. Many of the factors that applicants consider when selecting medical schools, such as curriculum, prestige, and geographical location, are likely to be similar across different national contexts. However, in countries like Canada, proximity to home, for example, may be more prominent in applicants' choices. Similarly, although different countries use varying classification measures, applicants from different socioeconomic backgrounds are likely to experience differing levels of capital, as described in the literature. Given the differences in geography, admissions processes, and postgraduate selection criteria across countries, the exact impacts on medical school choice may not be directly transferable, but the general principles (i.e. the theory) identified in this study are likely to be relevant across other contexts. I aimed to enhance transferability by providing detailed accounts of the national context, participants' backgrounds and decision-making processes. Although the specific options available and the nature of applicants' backgrounds may differ in other contexts, the underlying principles identified in this study, such as how individuals weigh opportunities against perceived constraints, or how forms of capital influence strategic choices, are likely to be relevant across a range of competitive educational settings. As such, I believe the insights from this research offer value beyond the immediate setting of UK medical school admissions.

One limitation of the study is that a portion of the sample consisted of first-year medical students, which introduces the potential for recall bias. Their reflections on the application process may be influenced by time, memory distortion, or post-admission experiences, potentially affecting the accuracy of their accounts. Current medical students may also have more favourable views of the medical schools they were admitted to, compared to those they were unsuccessful in. Although I made efforts to recruit participants from various stages of the application process to mitigate this bias, it remains a concern, especially given the subjective nature of participants' recollections.

Prior academic achievement is likely to have been a significant factor in participants' decision-making, but I did not formally collect this data. While some participants voluntarily shared information about their academic background, and many discussed how their perceived academic achievement influenced their choices, the study does not provide a clear understanding of how these perceptions were calibrated.

Another limitation is related to the categorisation of participant background. Social class is difficult to quantify, and there are no universally recognised criteria for categorising it. I adopted a classification system that uses individual, school, and area-level criteria, and I aimed to use participants' attributes to contextualise their statements. However, much of social class is determined by parental profession and income, and the study would have been strengthened by collecting more detailed data on these factors.

I did not thoroughly explore the influence of ethnicity on medical school choice, nor did I examine how it may intersect with socioeconomic background. This could be considered a limitation of the study, as some prior research has demonstrated that applicants from different ethnic groups may have different institutional preferences and perceptions of medical school culture. However, these patterns are frequently entangled with social class, making it difficult to disentangle the effects of ethnicity from other dimensions of disadvantage.

While my primary focus was on socioeconomic background, in line with UK widening participation policy, which has historically prioritised economic and educational disadvantage, this framing may have led to an under-exploration of how multiple elements of identity shape applicants' experiences. I collected data on participants' ethnicity, but I did not purposively sample or analyse the data through an intersectional lens, for example by exploring how being both from a lower

socioeconomic background and from an ethnically minoritised group may influence choice behaviour.

An explicitly intersectional approach to sampling, analysis, and/or theoretical framing would likely have yielded deeper insights into how overlapping systems of disadvantage shape choice behaviour. This is an important direction for future research, particularly as both ethnicity and class continue to be barriers o success in application to medical schools. Integrating an intersectional perspective would contribute to a more comprehensive understanding of the barriers faced by underrepresented groups and better inform policy and practice aimed at widening participation.

Lastly, the data were collected in 2018 and early 2019, and since then, several new medical schools have been established in the UK. While these were not included in this study, the principles identified—such as how participants prioritize medical school features, perceive their capital, and construct their choices—are likely to remain relevant and may apply to new institutions. Further research could examine how these findings translate to the newer medical schools.

9.9 Recommendations

Based on the findings in this thesis, I have made several key recommendations to enhance the effectiveness of widening participation and to further improve our understanding of choice and the implications of this. I have categorised the recommendations into those for policy, practice, and research.

Policy

1. **Clear communication of objectives of widening participation policy.**
   There is a need for improved messaging regarding the aims of widening participation policies. The way widening participation policy is communicated should emphasise that it is designed to redress existing inequalities in education and social capital rather than being to fulfil quotas.
2. **Reassessing the role of gateway programmes.**
   Gateway programmes provide an alternative entry route for widening participation applicants; however, they are highly competitive due to limited cohort sizes. Additionally, these programmes require an additional year of study, leading to increased debt and delayed earnings. Given evidence suggesting that applicants from lower-performing schools perform well once admitted to medical school (68), it may be fairer to embed contextualised

admissions within standard five-year programmes rather than relying on separate, extended pathways. One medical school has started doing this but their process does not extend to a decreased academic grade offer (4).

3. **Ensuring genuine choice for widening participation applicants in light of new medical schools.**
   Recent policy efforts have seen the establishment of new medical schools in underserved areas to recruit local applicants who will later serve their communities. While this is a positive step in widening access, there is a risk that applicants from lower socioeconomic backgrounds may feel constrained in their choices, aspiring to more established or prestigious institutions but fearing these may be too competitive. Policies should ensure that widening participation applicants are not limited in their options and have equitable access to all institutions.

Practice

4. **Improved applicant-facing guidance on medical school choice.**
   Applicants from lower socioeconomic backgrounds may lack access to informal networks and guidance that help navigate the medical school application process. Comprehensive, accessible resources should be developed to support applicants in understanding key selection factors, including the various ways UCAT is used by different institutions. Such guidance should empower applicants to make informed decisions aligned with their strengths and circumstances.

Research

5. **Applicant perspectives on widening participation and contextual admissions.**
   To improve how widening participation initiatives are communicated, further research should investigate applicants' perceptions of these policies. A robust qualitative study sampling individuals from a broad spectrum of socioeconomic backgrounds is necessary to explore attitudes toward contextual admissions and perceived fairness.
6. **Understanding applicant choice through a discrete choice experiment.**
   Further research into how applicants from different socioeconomic backgrounds prioritise various factors when selecting a medical school should be conducted. This could be investigated through a discrete choice experiment (213). This research would not only shed light on key drivers of

choice but also provide valuable information on applicants' propensity for risk when considering different options.

7. **Perceptions of competitive strength in applications.**
   Further qualitative research is required to explore how applicants assess their own competitiveness relative to other candidates. Understanding how different socioeconomic groups perceive the strengths and weaknesses of their applications could help inform more targeted interventions to enhance application success rates.
8. **Exploring the intersection of ethnicity and socioeconomic background in medical school choice.**
   Further research is needed to explore how ethnicity may intersect with socioeconomic background and influence application behaviour, school preferences, and potential disparities in admissions outcomes. Such research could help tailor policies to address intersectional inequalities in medical education.
9. **Investigating the impact of choice behaviour on application success.**
   Further research should explore how applicants' choice behaviour impacts their success in medical school admissions. A survey and cohort study could provide valuable insights into whether certain decision-making strategies or risk preferences influence application outcomes. This research would help answer the critical question: *Does it matter?* Understanding these dynamics could inform interventions that support applicants in making strategic choices.

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Appendix 1. Recruitment methods in different medical schools

School one

- I attended an offer holder visit day at which the director of admissions informed participants of the study during his presentation. After the presentation I recruited interested participants.
- An email was sent on my behalf by the administrator of the local widening participation scheme inviting individuals enrolled on the scheme to participate in the study.
- An email was sent on my behalf by a course administrator to current first year medical students at School one inviting them to participate in the study.

School two

- I attended a widening participation event hosted by the local widening participation scheme and gave a brief presentation regarding the research inviting individuals to participate.
- I attended a lecture for first year medical students and gave a brief presentation regarding the research inviting individuals to participate.

School three

- Individuals attending a widening participation residential were provided details of the study by the organiser and invited to participate in the study.
- I attended a lecture for first year medical students and gave a brief presentation regarding the research inviting individuals to participate.
- An email was sent on my behalf by the course director of the widening participation gateway scheme inviting current first year students to participate in the study.

School four

- An email was sent by the organiser of the local widening participation providing details of the study and inviting them to take part.
- Another researcher (KW) attended a lecture for first year students and gave a brief presentation about the study inviting individuals to participate.

School five

- Individuals receiving an offer to study medicine at School five were provided details of the study and invited to take part.
- An email was sent on my behalf by a course administrator to current medical students at School five inviting them to participate in the study.
- I attended a lecture for first year medical students and gave a brief presentation regarding the research inviting individuals to participate.

School six

- I attended a widening participation residential hosted by the local widening participation scheme and gave a brief presentation regarding the research inviting individuals to participate.
- The widening participation scheme co-ordinator at School six emailed students in his tutorial group and students undertaking a student selected component in widening participation inviting them to participate in the study.

School seven

- I attended an open day and gave a brief presentation regarding the research inviting individuals to participate.
- An email was sent on my behalf by the director of admissions to current first year medical students at School seven inviting them to participate in the study.
- School eight
- An email was sent on my behalf to students enrolled in a local widening participation scheme inviting them to participate.
- I attended a mock interview session for applicants enrolled on the local widening participation scheme and gave a brief presentation regarding the research inviting individuals to participate.
- I attended a widening participation event for student enrolled on the scheme and gave a brief presentation regarding the research inviting individuals to participate.
- I attended a lecture for first year medical students at School eight and gave a brief presentation regarding the research inviting individuals to participate.

Appendix 2. Background survey (applicants / potential applicants)

LONDON'S GLOBAL UNIVERSITY

UCL

FORM ABOUT YOUR BACKGROUND (Applicants) Unique identifier:_____

Thank you for being interviewed as part of the UK Medical Applicant Cohort Study. Please now complete this short form about your background and give it back to the research team. Do not put your name on it. You do not have to complete this form but it will help the research if you do.
Any questions? Please ask the research team or contact project lead Dr Katherine Woolf on 0203 108 9216 or k.woolf@ucl.ac.uk. UCL Research Ethics Reference: 0511/013.

YOU AND YOUR FAMILY

1. **Is one or more of your parents/primary carers a medical doctor?** Please circle ONE: *No* *Yes*
2. **Is one or more of your sisters or brothers a medical doctor, or studying medicine?** *No* *Yes*
3. **Are you close to anyone else who is a medical doctor or is studying medicine?** *No* *Yes*
4. **Does one or more of your parents/primary carers have a university degree (for example a BSc, BA, MA, MSc, or PhD)?** *No* *Yes*
5. **Does one or more of your sisters or brothers have a university degree, or are they currently studying at university for a degree?** *No* *Yes*
6. **Are any of your parents/primary carers currently in paid employment?** *No* *Yes*
7. **What is your ethnic group?** Please tick ONE that best describes your ethnic group or background.

White	Asian or Asian British	Black/African/ Caribbean/ Black British	Mixed/ multiple ethnic groups	Other ethnic group
English/Welsh/Scottish/ Northern Irish/ British ☐	*Indian* ☐	*Caribbean* ☐	*White & Black Caribbean* ☐	*Arab* ☐
Irish ☐	*Pakistani* ☐	*African* ☐	*White & Black African* ☐	*Other* _____ ☐
Gypsy / Irish Traveller ☐	*Bangladeshi* ☐	*Other* _____ ☐	*White and Asian* ☐	
Other _____ ☐	*Chinese* ☐		*Other* _____ ☐	
	Other _____ ☐			

PLEASE TURN OVER →

UKMACS
UK Medical Applicant Cohort Study

NHS
National Institute for Health Research

YOUR LOCAL AREA

8. What is your current postcode? Please WRITE in the box. We will use this to find out about your area.

YOUR SCHOOL

9. Which type of school do you go? If you're not at school, tell us about your last school. Tick ONE

Fee-paying (you pay, or you have a scholarship or bursary)	☐
State-funded not selective (free and you didn't need any particular grades or to pass a test to get in)	☐
State-funded and selective (free but you needed particular grades or to pass a test to get in)	☐
Other (please describe): _____	☐

10. How many people from your school applied to medical school last year? WRITE in the box.

If you're not sure, please guess: ☐

11. How many people from your school applied to Oxford or Cambridge last year? WRITE in the box.

If you're not sure, please guess: ☐

12. If you have been to another secondary school, which type of school was it? Please tick ONE.

Fee-paying (you pay, or you have a scholarship or bursary)	☐
State-funded not selective (free and you didn't need any particular grades or to pass a test to get in)	☐
State-funded and selective (free but you needed particular grades or to pass a test to get in)	☐
Other (please describe): _____	☐
I haven't been to another secondary school	☐

THANK YOU!

Please hand this form back to the research team

UKMACS
UK Medical Applicant Cohort Study

NHS
National Institute for Health Research

Appendix 3. Background survey (medical students)

LONDON'S GLOBAL UNIVERSITY

UCL

FORM ABOUT YOUR BACKGROUND (Medical students) Unique identifier:_____

Thank you for being interviewed as part of the UK Medical Applicant Cohort Study. Please now complete this short form about your background and give it back to the research team. Do not put your name on it. You do not have to complete this form but it will help the research if you do.
Any questions? Please ask the research team or contact project lead Dr Katherine Woolf on 0203 108 9216 or k.woolf@ucl.ac.uk. UCL Research Ethics Reference: 0511/013.

YOU AND YOUR FAMILY

1. **Is one or more of your parents/primary carers a medical doctor?** Please circle ONE: *No* *Yes*
2. **Is one or more of your sisters or brothers a medical doctor, or studying medicine?** *No* *Yes*
3. **Are you close to anyone else who is a medical doctor or is studying medicine?** *No* *Yes*
4. **Does one or more of your parents/primary carers have a university degree (for example a BSc, BA, MA, MSc, or PhD)?** *No* *Yes*
5. **Does one or more of your sisters or brothers have a university degree, or are they currently studying at university for a degree?** *No* *Yes*
6. **Are any of your parents/primary carers currently in paid employment?** *No* *Yes*
7. **What is your ethnic group?** Please tick ONE that best describes your ethnic group or background.

White	Asian or Asian British	Black/African/ Caribbean/ Black British	Mixed/ multiple ethnic groups	Other ethnic group
English/Welsh/Scottish/ Northern Irish/ British ☐	*Indian* ☐	*Caribbean* ☐	*White & Black Caribbean* ☐	*Arab* ☐
Irish ☐	*Pakistani* ☐	*African* ☐	*White & Black African* ☐	*Other* _____ ☐
Gypsy / Irish Traveller ☐	*Bangladeshi* ☐	*Other* _____ ☐	*White and Asian* ☐	
Other _____ ☐	*Chinese* ☐		*Other* _____ ☐	
	Other _____ ☐			

PLEASE TURN OVER →

UKMACS
UK Medical Applicant Cohort Study

NHS
National Institute for Health Research

YOUR LOCAL AREA

8. What is your home (non-term time) postcode? Please WRITE in the box. We will use this to find out about your area.

YOUR SCHOOL

9. Which type of school did you go? Tell us about the last school you attended. Tick ONE

Fee-paying (you pay, or you have a scholarship or bursary)	☐
State-funded not selective (free and you didn't need any particular grades or to pass a test to get in)	☐
State-funded and selective (free but you needed particular grades or to pass a test to get in)	☐
Other (please describe): _____	☐

10. How many people from your school applied to medical school last year? WRITE in the box.

If you're not sure, please guess: ☐

11. How many people from your school applied to Oxford or Cambridge last year? WRITE in the box.

If you're not sure, please guess: ☐

12. If you have been to another secondary school, which type of school was it? Please tick ONE.

Fee-paying (you pay, or you have a scholarship or bursary)	☐
State-funded not selective (free and you didn't need any particular grades or to pass a test to get in)	☐
State-funded and selective (free but you needed particular grades or to pass a test to get in)	☐
Other (please describe): _____	☐
I haven't been to another secondary school	☐

THANK YOU!

Please hand this form back to the research team

UKMACS
UK Medical Applicant Cohort Study

NHS
National Institute for Health Research

Appendix 4. Interview schedules

Interview questions one-to-one applicants/potential applicants

Thank you for taking part in the UK Medical Applicant Cohort Study. The aim of this research is to find out how people from different backgrounds choose which medical schools to apply to.

I'd like to audio record this interview and take some notes to help me accurately remember what was said. The recording will be sent to a professional independent transcriber. We will anonymise the transcript, which means we will remove anything that might identify you. All notes will also be anonymised.

What you say will be kept confidential – we won't share it with anyone outside of the research team. We will only publish it in a way that means that nobody can identify you.

Over the next half an hour or hour so, I'm going to be asking you a series of questions. There are no right or wrong answers, I just want to hear your opinions and experiences.

If at any time you want to stop, just let me know and we will stop.

[TURN ON TAPE]

Are you happy to go ahead?

1. Tell me a bit about yourself

a. Whereabouts in the country do you live? *(which city/town/village is that near?)*
b. Are you from there originally or did you grow up somewhere else?
   (*If somewhere else):* Where did you grow up?
c. Who do you live with at the moment?

2. Tell me about how you came to be applying/considering applying to study medicine *(how old were you when you first considered it? Did you talk to anyone about it?)*

a. *(if not yet applied)* How certain are you that you will apply to study medicine?
b. What is it about studying medicine or being a doctor that appeals to you? *(anything else?)*

c. Is there anything about studying medicine or being a doctor that puts you off ? (*anything else?)*
d. If you get into medical school, do you have an idea of where you ultimately would like to get to career-wise? *(do you know what specialty you might like to work in? Whereabouts you might want to work?)*

3. I'm going to ask some questions about choosing a medical school.

a. Which medical schools have you/do you think you might apply to?
b. Which of those is your first choice? Why? (*probe to get as many reasons and explanations as possible e.g. anything else? Why is that important to you?)*
c. Is there anything that puts you off [first choice]? (probe to get as many reasons as possible: *anything else? Why is does that matter to you)*
d. What made you to choose/consider [second medical school]? (*anything else?)*
e. Is there anything that puts you off it?
f. What made you to choose/consider [third medical school]? (*anything else?)*
g. Is there anything that puts you off it?
h. What made you to choose/consider [fourth medical school]? (*anything else*?)
i. Is there anything that puts you off it?
j. When you're choosing a medical school, what is the most important consideration for you? (*why is that the most important to you?)*
k. If you knew that you were guaranteed get a place at any medical school in the country, which one would you choose? Why?
l. *(if they haven't said they're applying there)* Why aren't you applying / thinking of applying there?
m. Thinking about your chances of getting a place anywhere, is there anything that you think might work in your favour and help you get a place? How important do you think that is?
n. Is there anything you think might work against you? How important do you think that is?
o. How likely to do you think it is that you will end up studying medicine?
p. If you don't study medicine, what do you think you will you do instead?

4. I'm going to ask you some questions about the information you used /will use to choose a medical school, and where you get that information from.

a. Have you spoken to anyone / anyone else about which medical schools you might apply to?

(*If YES*): Who?

(*For each person mentioned*): (*if relevant)* How did you meet that person? How much did they influence your choices of medical school?

(If NO): Are you planning on talking to anyone about choosing which medical schools to apply to?

(If YES): Who?

(for each person): Why them? *(if relevant)* How will you get in touch with them?

(I*f NO)*: Why not?

b. What other information or resources did you/will you use to help you choose a medical school? (*anything else? Try to get specifics e.g. which website?)*
c. How did you hear about or get access to that information? (*for example, if it's a website, who told them about it? If they went on a visit, how did they arrange that? If they spoke to someone, how do they know that person? If they're part of a medical school widening participation programme, how did they hear about that programme? ask about each resource*)
d. Of all the information you've had so far, which was most useful in helping you decide which medical schools to apply to? Why?
e. If you were to advise someone else about getting information to help them choose which medical schools to apply for, what would you tell them?

5. Thank you very much. That's all my questions.

a. Is there anything else you want to tell me about? Or any questions you have for me?

Interview questions one-to-one first year medical students

Thank you for taking part in the UK Medical Applicant Cohort Study. The aim of this research is to find out how people from different backgrounds choose which medical schools to apply to.

I'd like to audio record this interview and take some notes to help me accurately remember what was said. The recording will be sent to a professional independent transcriber. We will anonymise the transcript, which means we will remove anything that might identify you. All notes will also be anonymised.

What you say will be kept confidential – we won't share it with anyone outside of the research team. We will only publish it in a way that means that nobody can identify you.

Over the next half an hour or hour so, I'm going to be asking you a series of questions. There are no right or wrong answers, I just want to hear your opinions and experiences.

If at any time you want to stop, just let me know and we will stop.

[TURN ON TAPE]

Are you happy to go ahead?

1. Tell me a bit about yourself

d. Can you tell me a bit about yourself?
e. When you're at medical school, do you live at home or in halls or somewhere else?

    (if live at home) Whereabouts in the country do you live? *(which city/town/village is that near?)*

    (*If don't live at home)* Whereabouts in the country do you live when you're at home i.e. not at medical school? *(which city/town/village is that near?)*

f. Are you from there originally or did you grow up somewhere else?

    (If somewhere else): Where did you grow up?

g. Did you live there or somewhere else when you were applying to medical school?

2. Now I'm going to ask you about choosing to study medicine

a. Can you tell me about how you came choose medicine? *(how old were you when you first considered it? Did you talk to anyone about it?)*
b. When you were applying to medical school, what was it about studying medicine or being a doctor that appealed? *(anything else?)*
c. At the time, was there anything about studying medicine or being a doctor that put you off? (*anything else?)*
d. When you were applying, did you have any idea of where you ultimately would like to get to career-wise? *(what specialty you wanted to work in?)*

3. I'm going to ask some questions about how you chose which medical schools to apply to.

q. Think back to when you were applying to medical schools, can you describe to me what the perfect medical school would have looked like for you?
    a) What things about it would have appealed to you?
r. Can you tell me how you came to decide which medical schools to apply to?

s. Was [*current medical school*] your first choice?
    a) *[if current med school not first choice]* Which was your first choice?
t. Thinking about your first choice of medical school, what did you like about it?
u. Can you tell me about anything that was off-putting? *(probe)*

[Then compare and contrast each of their choices]

v. What did you like about the other schools you applied to?
w. Did anything put you off them? *(what?)*
x. What was it about your first choice that made you prefer it to these other schools?
y. Bearing all that in mind, when you were choosing medical schools to apply to, what were the most important considerations for you?
z. Were there any medical schools you immediately ruled out? Why? (probe)
aa. When you were applying, if you'd have known that you were guaranteed get a place at any medical school in the country, which one would you have chosen? Why?
    a) *(if they haven't already mentioned it)* Why didn't you apply there?
bb. When you were applying, was there anything you thought might work in your favour and help you get a place? How important do you think that was?
cc. Was there anything you thought might work against you? How important do you think that was?
dd. What would you have done if you didn't get in to any of these medical schools?

4. I'm going to ask you some questions about the information you used to choose a medical school and where you got that information.

f. As you know there are lots of medical schools, how did you find out what each of them was like?
g. When you were choosing medical schools, what information or resources did you use to help you make those choices?
h. How did you know where to get that information or access those resources?
i. Did you speak to anyone / anyone else about which medical schools you might apply to?

(If YES): Who?

(for each person): How much did what they have to say influence you?

(If NO): Why not?

j. If you were to advise someone else about getting information to help them choose which medical schools to apply for, what would you suggest?

5. Thank you very much. That's all my questions.

b. Is there anything else you want to tell me about? Or any questions you have for me?

Group interview questions applicants/potential applicants

Thank you for taking part in this research. The aim of it is to find out how people from different backgrounds choose which medical schools to apply to.

I'd like to audio record this interview and take some notes to help me accurately remember what was said. The recording will be sent to a professional independent transcriber. We will anonymise the transcript, which means we will remove anything that might identify you. All notes will also be anonymised.

What you say will be kept confidential – we won't share it with anyone outside of the research team. We will only publish it in a way that means that nobody can identify you.

Can we all also agree to keep everything in this room confidential. So when you come out of here, don't say "Jo said this, or Ahmed said that". Also, please try not to talk about anyone in a way that means they could potentially be recognised. So don't say "Dr Smith at UCL", say "a doctor at UCL".

OK, so over the next hour or so, I'm going to be asking you a series of questions. There are no right or wrong answers, I just want to hear all of your opinions and experiences. I'm not looking for people to agree with one another. I'm interested in when you agree but also in when you don't agree.

If at any time anyone wants to stop or needs to leave, that's fine.

Any questions about any of that?

[TURN ON TAPE]

Are you happy to go ahead? (get a yes from everyone)

1. Tell me a bit about yourself

h. Whereabouts in the country do you live?
i. Are you from there originally or did you grow up somewhere else?
(*If somewhere else):* Where did you grow up?
j. Who do you live with at the moment?

2. Tell me about how you came to be applying/considering applying to study medicine *(how old were you when you first considered it? Did you talk to anyone about it?)*

e. *(if not yet applied)* How certain are you that you will apply to study medicine?
f. What is it about studying medicine or being a doctor that appeals to you? *(anything else?)*
g. Is there anything about studying medicine or being a doctor that puts you off ? (*anything else?)*
h. If you get into medical school, do you have an idea of where you ultimately would like to get to career-wise? *(do you know what specialty you might like to work in? Whereabouts you might want to work?)*

3. I'm going to ask some questions about choosing a medical school.

ee. Which medical schools have you/do you think you might apply to?
ff. Does anyone know which medical school is likely to be their first choice? Why? (*probe to get as many reasons and explanations as possible e.g. anything else? Why is that important to you?)*
gg. Is there anything that puts you off [first choice]? (probe to get as many reasons as possible: *anything else? Why is does that matter to you)*
hh. What about the other potential choices? Why that one? (*probe)*
ii. Are there any medical schools you're ruling out? Why? (*probe*)
jj. Considering everything we've said, when you're choosing a medical school, what is the most important consideration for you? (*why is that the most important to you?)*
kk. If you knew that you were guaranteed get a place at any medical school in the country, would anyone choose a medical school they are not going to apply to? Which one? Why?
ll. Thinking about your chances of getting a place to study medicine in general, is there anything that you think might work in your favour and help you get a place? How important do you think that is?
mm. Is there anything you think might work against you? How important do you think that is?

nn. How likely to do you think it is that you will end up studying medicine?

oo. If you don't study medicine, what do you think you will you do instead?

4. I'm going to ask you some questions about the information you used /will use to choose a medical school, and where you get that information from.

k. Has anyone spoken to someone about which medical schools you might apply to?

(*If YES*): Who?

(*For each person mentioned*): (*if relevant)* How did you meet that person? How much did they influence your choices of medical school?

l. Has anyone not spoken to someone about choosing a medical school? Are you planning on doing it?

(If YES): Who?

(for each person): Why them? *(if relevant)* How will you get in touch with them?

(I*f NO)*: Why not?

m. What other information or resources did you/will you use to help you choose a medical school? (*anything else? Try to get specifics e.g. which website?)*

n. How did you hear about or get access to that information? (*for example, if it's a website, who told them about it? If they went on a visit, how did they arrange that? If they spoke to someone, how do they know that person? If they're part of a medical school widening participation programme, how did they hear about that programme? ask about each resource*)

o. Of all the information you've had so far, which was most useful in helping you decide which medical schools to apply to? Why?

p. If you were to advise someone else about getting information to help them choose which medical schools to apply for, what would you tell them?

5. Thank you very much. That's all my questions.

c. Is there anything else you want to tell me about? Or any questions you have for me?

Appendix 5. Participant Information Sheets

Participant Information Sheet for Applicants to Medical School

UCL Research Ethics Committee Approval ID Number: 0511/013

YOU CAN KEEP THIS INFORMATION SHEET

Title of Study: Selecting the best medical workforce: The UK Medical Applicant Cohort Study.

Department: University College London Medical School.

Name and Contact Details of the Principal Researcher: Dr Katherine Woolf, k.woolf@ucl.ac.uk 020 3108 9216.

UCL Medical School, Room GF664, Royal Free Hospital, NW3 2PF.

We are inviting to take part in a research project about selection into medical school. Before you decided it is important for you to understand why the research us being done and what taking part will involve. Please read it carefully and talk about it with others if you want. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part. Thank you for reading this.

What is the purpose of this study?

The study aims to find out how people from different social backgrounds choose which medical schools to apply to, and to see if those choices affect their success. We hope this study will help medical schools to support applicants in making better choices.

Why have I been chosen?

For Part 1 of the study we are interviewing people who are interested in applying to medical school or who are at medical school. We are approaching people from a variety of social backgrounds who are in contact with one of eight UK medical schools: Brighton & Sussex, Dundee, Exeter, Hull-York, Keele, Lancaster, Southampton, UCL.

Do I have to take part?

No, taking part is voluntary. If you want to take part, we will ask you to sign a consent form. If you don't take part, this will not affect any applications you make to study medicine. It will not affect any education or support you get from any medical school. You can stop any time without telling us why. If you decide later that you wished you

hadn't taken part, please contact the research team and we will delete your information up to four weeks after the interview.

What will happen to me if I take part?

The research team will ask you to complete a consent form, to show you agree to take part. They will then ask you questions about choosing a medical school, either on your own or as part of a group. Individual interviews will take around 30 to 60 minutes; group interviews around 60 to 80 minutes.

After the interview, we will ask you to fill in a short survey about your background. This is so we know how many people from different backgrounds we have interviewed. It will also help us see how someone's background might affect the way they choose a medical school.

We will invite you to give us your email address so that we can send you a copy of the final report, or to take part in other related research. If you don't want to give us your email address you can still be interviewed.

Will I be recorded and how will the recorded information be used?

We will audio (sound) record the interviews. We will send the recordings to a professional transcriber to type up, and then the sound file will be deleted. Nobody outside of the project (other than the transcriber) will be allowed to listen to the recording or read the transcript. We will use the transcript to analyse and write up the study results for research.

What are the possible disadvantages and risks of taking part?

The risks of taking part in this study are very low. We do not plan to ask you questions we think will be upsetting. If you find anything upsetting you can contact Childline on 0800 1111 https://www.childline.org.uk/

What are the benefits of taking part?

You will get a certificate and a copy of the final research report if you want it. You may find that taking part is useful for thinking about your medical school choices. You may also benefit from knowing that you are taking part in research that aims to help medical applicants make better choices.

What if something goes wrong?

If you want to complain about this project, or if you feel that it has harmed you in any way, please contact the lead researcher Dr Katherine Woolf on k.woolf@ucl.ac.uk

who will acknowledge receipt of the complaint, investigate, and report back to you within a reasonable period of time. If you feel your complaint has not been properly dealt with, you can contact the Chair of the UCL Ethics Committee on ethics@ucl.ac.uk or at UCL, Gower Street, London WC1E 6BT.

Will my taking part in this project be kept confidential (private)?

All the information we collect about you during the research will be kept confidential. You will not be able to be identified in any reports or publications.

You will be given a unique number for this study. This number will be used to link together the information you give us in your interview, with your background information, your consent form, and your email address.

We will ask everyone who takes part in a group interview to agree that they will NOT tell anyone else what another named person said, although we cannot guarantee they will do this.

Interview recordings will be sent to a professional transcribed. Once typed up, all recordings will be deleted.

Limits to confidentiality

Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may have to contact relevant statutory bodies/agencies.

What will happen to the results of the research project?

The results will be published as part of a PhD (university degree) project, in articles, in reports, and in presentations. If you want, you can have a copy of the published results. We will store your information confidentially for up to 10 years. We may share your anonymised information (from which you cannot be identified) with other researchers.

Who is organising and funding the research?: The National Institute for Health Research.

Contact for further information: Dr Katherine Woolf k.woolf@ucl.ac.uk

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data, and can be contacted at data-protection@ucl.ac.uk. UCL's Data

Protection Officer is Lee Shailer and he can also be contacted at data-protection@ucl.ac.uk.

Your personal data will be processed for the purposes outlined in this notice. The legal basis that would be used to process your personal data will be you giving your consent. You can give your consent for the use of your personal data in this project by completing the consent form that has been provided to you.

Your personal data will be processed so long as it is required for the research project. If we can anonymise or pseudonymise the personal data you provide we will do this, and will try to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website: https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/

THANK YOU for reading this information sheet

and for considering to take part in this research study

Participant Information Sheet for Medical Students

UCL Research Ethics Committee Approval ID Number: 0511/013

YOU CAN KEEP THIS INFORMATION SHEET

Title of Study: Selecting the best medical workforce: The UK Medical Applicant Cohort Study.

Department: University College London Medical School.

Name and Contact Details of the Principal Researcher: Dr Katherine Woolf, k.woolf@ucl.ac.uk 020 3108 9216.

UCL Medical School, Room GF664, Royal Free Hospital, NW3 2PF.

We are inviting to take part in a research project about selection into medical school. Before you decided it is important for you to understand why the research us being done and what taking part will involve. Please read it carefully and talk about it with others if you want. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part. Thank you for reading this.

What is the purpose of this study?

The study aims to find out how people from different social backgrounds choose which medical schools to apply to, and to see if those choices affect their success. We hope this study will help medical schools to support applicants in making better choices.

Why have I been chosen?

For Part 1 of the study we are interviewing medical students at eight UK medical schools: Brighton & Sussex, Dundee, Exeter, Hull-York, Keele, Lancaster, Southampton, UCL. We are also interviewing people who are interested in applying to medical school.

Do I have to take part?

No, taking part is voluntary. If you want to take part, we will ask you to sign a consent form. If you don't take part, this will not affect the education or support you get from medical school. You can stop any time without telling us why. If you decide later that you wished you hadn't taken part, please contact the research team and we will delete your information up to four weeks after the interview.

What will happen to me if I take part?

The research team will ask you to complete a consent form, to show you agree to take part. They will then ask you questions about choosing a medical school, either on your own or as part of a group. Individual interviews will take around 30 to 60 minutes; group interviews around 60 to 80 minutes.

After the interview, we will ask you to fill in a short survey about your background. This is so we know how many people from different backgrounds we have interviewed. It will also help us see how someone's background might affect the way they choose a medical school.

We will invite you to give us your email address so that we can send you a copy of the final report, or to take part in other related research. If you don't want to give us your email address you can still be interviewed.

Will I be recorded and how will the recorded information be used?

We will audio (sound) record the interviews. We will send the recordings to a professional transcriber to type up, and then the sound file will be deleted. Nobody outside of the project (other than the transcriber) will be allowed to listen to the recording or read the transcript. We will use the transcript to analyse and write up the study results for research.

What are the possible disadvantages and risks of taking part?

The risks of taking part in this study are very low. We do not plan to ask you questions we think will be upsetting. If you find anything upsetting you can you can speak to your university or medical school counselling or support service.

What are the benefits of taking part?

You will get a certificate and a copy of the final research report if you want it. You may find that taking part is useful for thinking about your medical school choices. You may also benefit from knowing that you are taking part in research that aims to help medical applicants make better choices.

What if something goes wrong?

If you want to complain about this project, or if you feel that it has harmed you in any way, please contact the lead researcher Dr Katherine Woolf on k.woolf@ucl.ac.uk who will acknowledge receipt of the complaint, investigate, and report back to you within a reasonable period of time. If you feel your complaint has not been properly dealt with, you can contact the Chair of the UCL Ethics Committee on ethics@ucl.ac.uk or at UCL, Gower Street, London WC1E 6BT.

Will my taking part in this project be kept confidential?

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You will be given a unique number for this study. This number will be used to link together the information you give us in your interview, with your background information, your consent form, and your email address.

We will ask everyone who takes part in a group interview to agree that they will NOT tell anyone else what another named person said, although we cannot guarantee they will do this.

Interview recordings will be sent to a professional transcribed. Once typed up, all recordings will be deleted.

Limits to confidentiality

Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may have to contact relevant statutory bodies/agencies.

What will happen to the results of the research project?

The results will be published as part of a PhD (university degree) project, in articles, in reports, and in presentations. If you want, you can have a copy of the published results. We will store your information confidentially for up to 10 years. We may share your anonymised information (from which you cannot be identified) with other researchers.

Who is organising and funding the research?: The National Institute for Health Research.

Contact for further information: Dr Katherine Woolf k.woolf@ucl.ac.uk

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Your personal data will be processed so long as it is required for the research project. If we can anonymise or pseudonymise the personal data you provide we will do this, and will try to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website: https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/

THANK YOU for reading this information sheet

and for considering to take part in this research study

Appendix 6. Consent form

I understand:

- **I need to tick EACH BOX below to consent to EACH PART of the study.**
- **If I DO NOT tick one box this means that I do not consent to THAT PART of the study.**
- **If I DO NOT tick ALL BOXES I may not be able to take part in the study at all.**

Please tick:

I have read, understood, and thought about the Information Sheet for this study. I have had the chance to ask questions, which have been answered.	☐
I am happy to take part in a group discussion or an individual interview.	☐
I am happy to complete the short survey about my background.	☐
I agree to my interview being audio-recorded. I understand the recordings will be destroyed immediately after transcription. *(If you do not want to be recorded you can still take part)*	☐
I agree that the personal information I give the research team and can be used in the way explained to me. I understand my personal information will be handled according to the law on data protection. ['Personal information' means: my name, contact details, what I say in the interview, my survey answers.]	☐
I understand my personal information will remain confidential, and the research team will do everything they can to make sure I cannot be identified.	☐
I understand that if I take part in a group interview, confidentiality cannot be guaranteed.	☐
I understand my name and contact details will be kept separately from my other information, and linked by a unique identifier (a number unique to me, used only for this study).	☐
I understand the personal information I give the researchers will be kept anonymously and securely on password-protected computers or in encrypted files. It will not be possible to identify me in any reports.	☐
I understand taking part in this study is voluntary. If I no longer want to take part, I can stop immediately without giving a reason and my rights will not be affected. I understand that if I ask them to, the researchers will delete any personal information I have given up to 4 weeks after the interview.	☐
I understand the potential risks of taking part and the support I can get if I get upset during the research.	☐
I understand the benefits of taking part.	☐
I understand my information will not be made available to any commercial organisations.	☐
I understand I will not benefit financially from this study or from any outcome it may result in in the future.	☐
I agree that my anonymised research data (from which I cannot be identified) may be used for future research.	☐
I understand that the information I have given the researchers will be published as a report.	☐
I would like to receive a copy of the report.	☐
My information will be stored securely at UCL for a minimum of 10 years after the report is published.	☐
I know who I should contact if I want to make a complaint about this research.	☐

We would like to keep your contact details so UCL researchers can invite you to take part in other parts of this study or other similar studies. Please tick one to tell us if you are happy to be contacted:

YES, I would be happy to be contacted for future research. ☐

NO, do not contact me. ☐

Please write your name and sign and date this form in the boxes below:

Your first name(s):	
Your surname:	
Your signature:	
Today's date:	
Your permanent email address: For a copy of the report and/or to be invited for future research	