

Learning in practice

“Not a university type”: focus group study of social class, ethnic, and sex differences in school pupils’ perceptions about medical school

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Abstract

Objective To investigate what going to medical school means to academically able 14-16 year olds from different ethnic and socioeconomic backgrounds in order to understand the wide socioeconomic variation in applications to medical school.

Design Focus group study.

Setting Six London secondary schools.

Participants 68 academically able and scientifically oriented pupils aged 14-16 years from a wide range of social and ethnic backgrounds.

Main outcome measures Pupils’ perceptions of medical school, motivation to apply, confidence in ability to stay the course, expectations of medicine as a career, and perceived sources of information and support.

Results There were few differences by sex or ethnicity, but striking differences by socioeconomic status. Pupils from lower socioeconomic groups held stereotyped and superficial perceptions of doctors, saw medical school as culturally alien and geared towards “posh” students, and greatly underestimated their own chances of gaining a place and staying the course. They saw medicine as having extrinsic rewards (money) but requiring prohibitive personal sacrifices. Pupils from affluent backgrounds saw medicine as one of a menu of challenging career options with intrinsic rewards (fulfilment, achievement). All pupils had concerns about the costs of study, but only those from poor backgrounds saw costs as constraining their choices.

Conclusions Underachievement by able pupils from poor backgrounds may be more to do with identity, motivation, and the cultural framing of career choices than with low levels of factual knowledge. Policies to widen participation in medical education must go beyond a knowledge deficit model and address the complex social and cultural environment within which individual life choices are embedded.

Introduction

The principle that medical school intake should reflect the ethnic and socioeconomic mix of the population has been endorsed by the UK Council on Heads of

Medical Schools¹ and underwritten by generous “Widening Participation” payments to universities.² But recruiting applicants from non-traditional groups is proving difficult,³ and major disparities by socioeconomic status and some ethnic groups remain.^{4,5}

Contemporary theories of recruitment and retention in higher education explain students’ choices (and failures) primarily in terms of personal identity, social capital, and the cultural “frames” in which potential options are considered (see discussion). As part of a needs assessment to inform enrichment initiatives at University College London, we sought to find out what going to medical school meant to academically able 14-16 year olds.

Participants and methods

We approached six schools, chosen to provide a wide mix of socioeconomic and ethnic backgrounds (table 1); all agreed to participate. Teachers were asked to identify Year 10 and 11 pupils (age 14-16 years) who were predicted to gain high GCSE grades in subjects relevant to medical school and who had shown interest in applying. (Details of the background of each school and the research process are given in Box A on bmj.com).

To begin the focus group, the lead researcher showed a silhouette of a face and told the group: “This is X, who is a 16 year old pupil applying to medical school this year. She/He is probably going to do well—what do you think she/he is like?” After a discussion of the qualities of this “successful” fictitious pupil, the group were shown another silhouette and told “Y is a pupil of the same age who is thinking of applying to medical school—but she/he has got some concerns. What do you think these might be? What do you think the barriers might be to her/him succeeding?” The sex and ethnicity of the fictitious pupils were varied in different groups. Further discussion prompts were intro-

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Details of the schools involved in the study and quotes illustrating the main themes from the study appear on bmj.com

duced to explore the pupils' perceptions and aspirations about medical school.

All focus group discussions were transcribed and annotated with contemporaneous field notes. Data were analysed using the constant comparative method (see bmj.com) and a preliminary list of themes circulated to a contact at each school for respondent validation.⁶

Results

Sixty eight pupils from diverse ethnic backgrounds took part (table 1). We found marked differences by socioeconomic status as assessed by occupation of head of household. The main themes are listed below, and illustrative quotes are given in box B on bmj.com.

Focus group dynamics

In both the inner city focus groups that included boys there was a cohort of vocal "lads" with strong peer group identity exhibited through accent, dress, and behavioural norms, whose interjections were directed at subverting the purpose of the focus group through humour and "bad boy" activities (see box B on bmj.com for examples). These boys were highly able (one disruptive pupil from school A, for example, had recently won a national scholarship to study A levels at a leading private school) but presented themselves as non-academic and not really a serious part of the research study. Careers teachers confirmed similar behaviour from these boys in class.

Reasons for wanting to do medicine

Pupils from higher socioeconomic groups viewed medicine as having high intrinsic rewards such as personal fulfilment and achievement, and as one option in a menu of other high status career paths. Many such pupils had done their own research and had a clear strategy for pursuing their goal. Pupils from lower socioeconomic groups, especially boys, talked more about the extrinsic (financial) rewards of medicine and about the "blood and guts" of the job. They had a stereotyped view of doctors, often derived from media

images, and had not tried to flesh out the detail of particular options.

Perceptions and concerns about applying to medical school

Many pupils had hazy perceptions of the steps needed to become a doctor ("Do you need any sciences?"). All believed that entry is highly competitive and were anxious about making the grade. Inner city pupils rated their chance of an application being successful at around 1 in 10 (in reality it is around 2 in 3). Pupils from comprehensive schools felt that not having perfect grades would put them at a disadvantage compared with applicants from "better" schools.

Few pupils had made a firm commitment to medicine by Year 11 (15-16 years old), and resented cutting off alternative choices at a young age. Independent school pupils were more confident that they would achieve a place at medical school and were less prepared to "jump through hoops" to bolster their applications. Pupils from the schools in the two most deprived areas often had only a vague idea of the alternative options ("There's always cars") available to them if they failed to make the grade for medicine, and boys in particular did not plan to make strategic "insurance choices."

Who gets in?

All the groups gave a similar picture of the person who finds it easy to gain a place and succeed at medical school. Typical descriptors were intelligent, hardworking, dedicated, tough, interested in people, caring, enthusiastic, ambitious, and able to cope with pressure. There was a strong perception among less affluent pupils that high social class and a privileged education would confer an advantage in the admissions process.

What is medical school like?

Almost all pupils were ignorant of what actually goes on at medical school and about medicine as a profession. Pupils from inner city schools had concrete concerns about the physical environment at university, especially food choices and type of "dormitories"; more affluent pupils did not raise these issues at all.

Table 1 Characteristics of the six schools that participated in the focus group study

School code	Type	Jarman score of area*	School catchment population		Composition of focus group	
			Ethnicity and religion†	Sex	Ethnicity	Occupation of head of household
A	Community comprehensive	53.10	22% black, 52% Asian, 19% white; non-sectarian	Mixed	5 black, 2 white, 1 Asian, 1 other	Mostly routine, semi-routine, or unemployed
B	Voluntary aided comprehensive	45.45	Mixed ethnicity; non-sectarian	Boys	7 white, 1 black, 3 other	Mostly routine, semi-routine, or unemployed; one lower professional
C	Community comprehensive	54.59	99% Asian Bangladeshi; Muslim	Girls	8 Asian, 3 not disclosed	5 unemployed; 3 own account workers; 3 not disclosed
D	Community comprehensive	13.56	Mixed ethnicity; non-sectarian	Mixed	11 white, 2 black, 1 Asian, 2 other	Broad range from routine to professional
E	Voluntary aided comprehensive	19.65	23% black, 68% white, 2% Asian; Catholic	Girls	4 black, 1 white, 1 other	Broad range from semi-routine to professional
F	Independent selective	-28.57	Mixed, with "high proportion of Asians"; non-sectarian	Boys	7 Asian, 4 white, 4 other	Professional and managerial

*The Jarman (underprivileged area) score is a commonly used ecological measure of socioeconomic deprivation. The mean for England is zero. Scores >30 are considered to indicate substantial deprivation.

†These details were supplied by the schools or obtained from their prospectuses; where no detailed breakdown is given this was because the school did not wish to disclose these data.

All pupils perceived medical training as a long, hard course with little time for socialising. But there were important differences in what this meant for them. Pupils from professional backgrounds saw intrinsic rewards in the coursework (“tiring but fun”). Those from the lower professional and intermediate backgrounds described a trade-off (sacrifice now for rewards later). But pupils from lower socioeconomic groups often saw no intrinsic reward from the academic work (“it’s cruel”) and struggled with the idea of deferred gratification.

A few inner city pupils had a perception of university as “changing your life,” but this change was seen in distant, global, and somewhat unreal terms. When asked for specific examples, these same pupils could only cite individuals who had dropped out of university.

The high cost of medical training was a concern for all pupils, but those from professional families did not see it as influencing their choices. Some inner city pupils were dimly aware of scholarship schemes for which they might be eligible. Pupils from schools D and E (mostly lower professional and intermediate backgrounds) were concerned that they would be ineligible for financial benefits and that on graduation they would face severe financial hardship compounded by long hours and work stress.

There was a big fear about failing and dropping out. Inner city pupils greatly overestimated the likelihood of failing the course (one group rated this at 74%), and as the quotes on *bmj.com* show, this fear was closely linked to anxieties about money.

Need for information and resources

Pupils wanted information about what doctors do, what goes on at medical school, and admissions requirements, especially from independent sources that would allow them to compare the strengths and limitations of different courses. University websites and prospectuses gave admissions information directed at pupils aged over 16 years, but this was not experienced as meaningful by the younger age groups in this study.

Parental support was often mentioned spontaneously. Boys were more likely to see parental support in financial terms, whereas girls saw it more terms of psychological and emotional support, and, for the Asian girls, the opportunity to live at home.

All groups felt that talking to real students and recent graduates would be the best way of finding out what medical school (and medicine) is really like. The crucial characteristic of a credible person to speak to was homophily with the pupils themselves. Girls in particular wanted subjective and motivational information from someone they identified with (and who could identify with them).

The pupils from inner city schools were cynical about glossy brochures and people from universities who came round to market their courses. All groups were keen on work experience in which they met real patients and gained a flavour of what medicine is really like. The most useful placements were felt to be shadowing junior doctors. Some told stories of friends who had been given “unsuitable” placements (that is, without direct patient contact) such as microbiology labs or administration.

Discussion

This in depth study of London school pupils aged 14–16 years reveals important differences by socioeconomic background in perceptions of, and aspirations to, medical school, which both outweighed and moderated the influence of sex and ethnicity. Working class boys (those who identified their head of household as in a routine or semi-routine job or unemployed) showed a common pattern of intense peer group bonding, anti-school values, low self confidence despite high academic ability, and cynicism towards enrichment initiatives—a combination that may account for the continuing poor recruitment of both white and black pupils from lower socioeconomic groups to UK medical schools.^{4,5}

Two main approaches have been used to study how pupils choose their post-16 options. Quantitative surveys, in which participants are asked to indicate which of a list of possible factors influenced a particular choice, can test hypotheses about macro-level links between attainment variables (such as A level points) and application success.^{2,7–9} In depth qualitative studies provide a rich picture of a smaller number of individual decisions and are the method of choice for exploring the reasons for particular choices in defined subgroups.^{10,11}

Comparisons with other studies

Our findings align closely with those of, several other recent studies, which also found socioeconomic, rather than ethnic, differences to be the most critical influence on university choices.^{11–13}

Paul Willis, who undertook a detailed ethnographic case study of a group of “lads” in their final year of a

Table 2 Two kinds of higher education choosers (adapted from Ball et al^{43,44})

Dimension	Contingent chooser	Embedded chooser
Socioeconomic status	Typically low	Typically high
Family history	“First time” choosers with no family tradition of higher education	Choice is embedded in a “deep grammar of aspiration” which makes higher education normal and necessary
Link with wider life narrative	Choice is distant or “unreal”	Choice is part of a normal biography or cultural script—links “where I have come from” with “where I am going”
Link with immediate or longer term aspirations	Choice is short term and weakly linked to “imagined futures”—part of an incomplete or incoherent narrative	Choice is long term and often relates to vivid and extensive “imagined futures”—part of a coherent and planned life course
Information base	Choice uses minimal information, usually from formal sources such as prospectuses and media images	Choice is based on extensive and diverse sources of information, including formal and informal sources and personal role models
Focus and detail	Few variables are considered when making the choice	Choice is specialist or detailed
Geographical	Narrowly defined socioscaples and spatial horizons—choices are “local” and distance is a friction	Broad socioscaples and social horizons—choices are “national,” distance is not an issue
Parental	Parents are “onlookers” or “weak framers”; mothers may give practical support	Parents are “strong framers” and active participants in choice
Financial	Key concern and constraint	Aware of financial issues, but these do not influence decision
Use of social capital	Minimal social capital (contacts, influence, personal support) is used to underpin choice	Extensive social capital is mobilised to underpin choice (such as providing advice, arranging work experience)
Ethnic	Ethnic mix of the higher education institution is an active variable in determining choice	Ethnic mix of the higher education institution is marginal or irrelevant to choice

What is already known on this topic

There are wide disparities in medical school admission by social class

Widening participation initiatives in medicine have so far had limited impact

This may be because they often seek to “top up knowledge” rather than addressing motivation, identity, and culture

What this study adds

School pupils from working class backgrounds see medical school as distant, unreal, and culturally alien

They may link their cultural identity to anti-academic values

They also associate a medical education with prohibitive personal risk and greatly underestimate their chances of successful application

northern secondary modern school in the 1970s, made the controversial suggestion that the link between traditional working class identity and academic failure was embodied and reproduced in the social relations of the school itself.¹⁴ The lads’ resistance to school authority and rejection of its values allowed them to build a strong counterculture of “mucking about” and resisting work—but this very counterculture inexorably destined and prepared them for working class identities and jobs. A more recent study in an ethnically mixed sample produced similar findings.¹⁵

The notion that, despite the rhetoric of meritocracy, working class pupils cannot be classified as active choosers in education has been developed further by Bordieu,¹⁶ who sees choice as part of the “normal” middle class life narrative, in which a spell at university is highly congruent with family and peer values, financial security can generally be assumed, individual identity is independent of a particular locality and peer group, and the only choice is between institutions and courses. Others, drawing on Bordieu, have described the working class decision to enter post-compulsory education as far more limited, generally discordant with personal and cultural identity, associated with major financial risk and separation from a valued local peer group, and (therefore) highly contingent on structural influences, chance, and circumstances.^{11 17 18}

On the basis of their empirical findings, Ball et al produced a theoretical taxonomy of higher education chooser based on two “ideal types”: contingent and embedded.¹⁹ Their model (which we have adapted slightly in table 2) accounts for many of the class differences we observed in our study.

Implications for policy

The UK government’s latest policy documents on widening participation recognise that achieving diversity in higher education must go beyond the knowledge deficit model and address the root causes of low motivation and cultural disaffection in non-traditional

students.²⁰ We discuss possible practical implications of this on bmj.com.

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- 1 Council of Heads of Medical Schools. Medical education and research: CHMS statement of principles. www.chms.ac.uk/key_prin.html (accessed 8 Jan 2004).
- 2 Higher Education Funding Council. *Social class and participation: good practice in widening access to education (follow-up to ‘From elitism to inclusion’)*. London: Higher Education Funding Council, 2003.
- 3 McManus IC. Medical school applications—a critical situation. *BMJ* 2002;325:786-7.
- 4 Grant J, Jones L, Lambert T. *An analysis of trends in applications to medical school*. Milton Keynes: Open University Centre for Education in Medicine, 2002.
- 5 Seyan K, Greenhalgh T, Dorling D. The standardised admission ratio for measuring widening participation in medical schools: analysis of UK medical school admissions by ethnicity, socioeconomic status, and sex. *BMJ* 2004;328:1545-6.
- 6 Glaser BC, Strauss AL. The constant comparative method of qualitative analysis. In: Glaser B, Strauss AL, eds. *The discovery of grounded theory*. Chicago: Adline, 1967.
- 7 Connor H, Burton R, Pearson R, Pollard E, Regan J. *Making the right choice: how students choose universities and colleges*. London: Institute for Employment Studies for the Committee of Vice-Chancellors and Provosts, 1999.
- 8 Connor H, Dewson S. *Social class and higher education: issues affecting decisions on participation by lower social class groups*. London: Department for Education and Employment, 2001. (DfEE research report RR267.)
- 9 Hogarth T, Purrell K, Pitcher J, Wilson R, Macguire M. *The participation of non-traditional students in higher education (report M8/97)*. Bristol: Higher Education Funding Council, 1997.
- 10 Foskett N, Hesketh AJ. *Student decision-making in the post-16 marketplace*. Southampton: Heist Publications, 1996.
- 11 Foskett N, Hemsley-Brown J. *Choosing futures: young people’s decision-making in education, training and careers markets*. London: Routledge-Falmer, 2001.
- 12 Ball SJ, Davies J, David M, Reay D. ‘Classification’ and ‘judgement’: social class and the ‘cognitive structures’ of choice of higher education. *Br J Sociol Educ* 2002;23:51-72.
- 13 Ball SJ, Reay D, David M. ‘Ethnic choosing’: minority ethnic students, social class and higher education choice. *Race Ethnicity Educ* 2002;5:333-57.
- 14 Willis P. *Learning to labour: how working class kids get working class jobs*. Farnborough: Saxon House, 1977.
- 15 Archer L, Hutchings M. *Bettering yourself? Discourses of risk, cost and benefit in young working class non-participants’ constructions of higher education*. London: STORM Publishers, University of North London, 2000.
- 16 Bordieu P, Passeron JC. *Reproduction in education, society and culture*. London: Sage, 1990.
- 17 Cohen P, Hey V. *Studies in learning regeneration: consultation document*. London: University of East London and Brunel University, 2000.
- 18 Du Bois-Reymond M. ‘I don’t want to commit myself yet’: young people’s life concepts. *J Youth Stud* 1998;1:63-79.
- 19 Department for Education and Employment. *Learning to succeed: a new framework for post-16 learning*. London: DfEE, 1999.
- 20 Universities UK. *Fair enough: wider access to university by identifying potential to succeed*. London: Universities UK, 2003. (Accepted 22 March 2004)

Endpiece**The difference**

A doctor can bury his mistakes, but an architect can only advise his clients to plant vines.

Frank Lloyd Wright (1867-1959)

Fred Charatan, retired geriatric physician, Florida