

Fair Training Pathways for All:

Understanding Experiences of Progression

Final Report

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Table of Contents

Glossary.....	4
Executive Summary.....	5
1 Introduction	8
1.1 Purpose of the research	8
1.2 Context in which the research took place	8
1.2.1 Differential attainment in medical education and training	8
1.2.2 Causes of differential attainment	9
1.2.3 Risk and resilience	10
1.2.4 The junior doctor contract dispute	12
2 Methodology.....	13
2.1 Methods.....	13
2.2 Participant sampling framework and recruitment.....	13
2.3 Analytic framework	13
3 Results.....	14
3.1 Participants.....	14
3.2 Risks	14
3.2.1 Curricula, teaching, learning, and assessment.....	14
3.2.2 Trainee relationships at work	22
3.2.3 Psycho-social and identity.....	24
3.2.4 Capital.....	29
3.3 Summary of risks, and vulnerability and protective processes.....	35
3.4 Research question answers	40
3.5 Principles upon which interventions to increase resilience could be designed ...	43
3.5.1 Positive trainee-trainer relationships	43
3.5.2 Support from peers at work.....	49
3.5.3 Work-life balance and support outside work	50
3.5.4 Support from organisations and their representatives	51
3.5.5 Increasing or rekindling trainee motivation.....	52

4	Conclusions	53
	Standalone Summary	55
	References	59
	Appendix	62

Glossary

AKT	Applied Knowledge Test (part of MRCGP)
ARCP	Annual Review of Competence and Progression
BAPIO	British Association of Physicians of Indian Origin
BME	Black and Minority Ethnic
CASC	Clinical Assessment of Skills and Competencies (part of MRCPsych)
CCT	Certificate of Completion of Training
CSA	Clinical Skills Assessment (part of MRCGP)
CT	Core Training (e.g. CT1, CT2)
FY	Foundation Year (FY1/F1 or FY2/F2)
GMC	General Medical Council
HE	Higher Education
IMG	International Medical Graduate
LETB	Local Education and Training Board
MRCGP	Membership of the Royal College of General Practitioners
MRCP(UK)	Membership of the Royal Colleges of Physicians (United Kingdom)
MRCPsych	Membership of the Royal College of Psychiatrists Examination
NHS	National Health Service
PACES	Clinical Part of the MRCP(UK)
PLAB	Professional Linguistic Assessment Board
RCGP	Royal College of General Practitioners
RCP	Royal College of Physicians
SHO	Senior House Officer
ST	Specialty Training (e.g. ST1, ST2)
TPD	Training Programme Director
UK	United Kingdom
UKG	United Kingdom Graduate
US	United States

Executive Summary

Background, Aims and Objectives

This project was part of a programme of research commissioned by the General Medical Council (GMC) to explore why UK doctors from Black and Minority Ethnic (BME) groups, and doctors whose Primary Medical Qualification (PMQ) is from a medical school outside of the UK have, on average, poorer outcomes in assessments and recruitment compared to white doctors and UK medical school graduates (1).

Differential attainment is found internationally, at undergraduate level, and outside medicine. Its causes are poorly understood, but a 2015 Higher Education Funding Council England report (2) identified four broad categories of causal factors operating at a national policy (macro) level, an institutional (meso) level, and at an interpersonal (micro) level to impede BME UK students' performance (see Box 2, p9). We used this framework to identify causes of differential attainment in doctors' training and used psychological theories of risk and resilience (see p10-11) to understand how and why some doctors from groups with poorer average performance nonetheless do well.

The project aimed to identify facilitators, and barriers to progression that differentially impact on doctors depending on where a trainee obtained their PMQ and/or their ethnicity. Main objectives were to:

- 1) Explore the experience of undertaking postgraduate medical training from the point of view of trainees and trainers.
- 2) Understand the nature and causes of differential attainment.
- 3) Identify possible actions to change education and training pathways to make them fairer and reduce differences in outcomes.

Methods

We used qualitative semi-structured focus groups and one-to-one telephone interviews to explore the experiences of training from trainee and trainers' points of view.

We purposively sampled from four locations in England and Wales with different proportions of UK graduates (UKGs) and International Medical Graduates (IMGs) and differing average postgraduate examination performance; from white and BME groups; from UKG and IMG groups; from all stages of training; and from six specialties with differing competition ratios and proportions of IMGs, plus Foundation training. We interviewed trainers to triangulate the trainee findings.

Following previous research in UK Higher Education, we looked for evidence that differential attainment was caused by factors in four categories: Curricula, teaching, learning and assessment; Trainee relationships at work; Psychosocial and identity factors; and Capital. Within these we looked for risk factors and vulnerability processes that translated risks into

poorer outcomes for BME UKGs and IMGs, and protective processes that helped trainees achieve good outcomes.

Results

96 trainees and 41 trainers took part in 16 focus groups and 49 interviews in November and December 2015.

Postgraduate medical training posed risks to trainees from all ethnic/PMQ groups, but BME UKGs and IMGs faced additional risks in all four categories (see p14-35). Risks were often complexly interrelated, meaning the vulnerability processes which translated risks into poorer outcomes could involve risks from each of the four categories:

1. **Poorer relationships with seniors** and problems **fitting in** at work can lead to **fewer learning opportunities, lower confidence, and increased chance of mental health problems.**
2. Perception that **unconscious bias** in recruitment, ARCPs, and at work can lead to poorer outcomes, as can **anxiety about potential bias.**
3. **Poorer performance in exams and recruitment** can mean **less autonomy in job choice**, increased likelihood of being **separated from family and support networks**, and increased chance of mental health problems. Failing exams can **lower confidence**, and resits can be felt to **interfere with workplace learning.**
4. **Fear of being labelled as problematic** can impede trainees reporting problems, including perceived racism.
5. Potential for **lack of recognition from trainers about environmental stressors**, especially because within medicine there is a **belief that failure results from lack of motivation or ability.**

IMGs faced additional risks:

- **Inexperience with UK assessments, recruitment, UK cultural norms including communication, and NHS/work systems.**
- **Cultural differences** can **impede relationships with colleagues and potentially patients**, because of **unfamiliarity with UK cultural norms**, a feeling of **not being understood by UKGs**, and because **trainers can lack confidence in IMGs' prior training.**
- **Lengthy time to learn cultural norms.**
- Potential **stigma of supplementary help.**
- **Anxiety about increased probability of exam failure.**
- **Visa difficulties and costs, and ineligibility for jobs** can reduce training opportunities.

Protective processes for BME UKGs and IMGs were largely at the micro level, but could be affected by macro and meso-level changes:

- **Trainers having time to get to know their trainees** can increase trust, understanding, and confidence. Especially important as cultural differences can impede quick relationship-building. Possibly easier in General Practice.

- **Trainers showing trainees they believed in them** can help them concentrate on learning.
- **Trainers helping trainees overcome exam anxiety, providing tailored advice** about recruitment, and **explaining UK cultural norms** for IMGs can **increase confidence** and **improve performance**.
- **Emotional support from family and friends outside work** can help trainees with work difficulties.
- **Good relationships between trainees from different cultural groups** can provide **reassurance** and **practical support**.
- **Opportunities to meet IMGs** who understood and wouldn't judge them can provide IMGs with **practical and emotional support**.
- Aspirational and successful **role models** can **motivate** trainees, help them feel they **fit in**, and show them **practical ways of achieving their goals**.
- Support from **Deaneries and supervisors** can help trainees deal with **bullying, racism, and health problems**.
- **Deaneries being supportive of flexible working** can help those with caring responsibilities achieve work-life balance.
- **Staying goal-focussed** can increase trainee motivation to seek what they need to progress.
- **Framing challenges as opportunities** e.g. exam failure as a learning opportunity, can keep trainees motivated.

BME UKGs and IMGs could be impeded from protective processes by competing vulnerability processes, e.g. feeling trainers believe in you can boost confidence and performance but trainers reported less faith in IMGs' prior qualifications and abilities.

Conclusions

Postgraduate medical training is psychologically risky, and some risks seemed to vary between environments and specialties. Trainees from BME UKG and IMG groups can face additional risks and vulnerability processes which can impede performance, often by affecting personal relationships.

Protective processes that facilitate trust and positive relationships can lead to increased learning opportunities and confidence. Environmental changes may be able to facilitate these relationships at work and outside work.

Risks, and vulnerability and protective processes were interrelated in complex ways - changes in one area will likely lead to changes in another. Interventions should focus on those which affect the most trainees, are most amenable to change, and will have the largest impact.

1 Introduction

1.1 Purpose of the research

This project aimed to identify facilitators, and barriers to, progression that differentially impact on doctors depending on where a trainee obtained their PMQ and/or their ethnicity.

Main objectives were to:

- 1) Explore the experience of undertaking postgraduate medical training from the point of view of trainees and trainers.
- 2) Understand the nature and causes of differential attainment.
- 3) Identify possible actions to change education and training pathways to make them fairer and reduce differences in outcomes.

The research questions were:

- 1) What does a supportive learning environment for post-graduate trainees involve?
- 2) How, if at all, could the current support provided to trainees be improved?
- 3) What are the key challenges that trainees have to negotiate in order to successfully progress through recruitment, Annual Reviews of Competence Progression (ARCPs) and exams?
- 4) What strategies do trainees use to successfully negotiate these key challenges?
- 5) How, if at all, do cultural and social norms, attitudes and behaviours impact on attainment and progression?
- 6) Are the education and training pathways perceived as fair for all?
- 7) What changes, if any, could be made to education and training pathways to ensure these are fair for all trainees?
- 8) Are trainees and trainers aware of gaps in attainment between different groups of trainees? If so, what do they believe causes this?

1.2 Context in which the research took place

1.2.1 *Differential attainment in medical education and training*

International medical graduates (IMGs) are more likely to fail postgraduate assessments and have poorer outcomes in recruitment compared to UK graduates (UKGs)(1). Similar patterns are found in the United States (US), Canada, and Australia (3-7). Doctors from Black and Minority Ethnic (BME) groups also have poorer academic and recruitment outcomes compared to white doctors(1), and similar patterns are found in undergraduate medical education in the UK, US, Netherlands, and Australia (8-10) and in UK higher education more generally (11, 12).

The UK Equality Act (2010) makes it unlawful to discriminate against people on the basis of their membership of a group with a protected characteristic, of which there are nine (see Box 1). Differences in the average performance of groups with and without protected characteristics is called *differential attainment*.

The current report is concerned primarily with differential attainment on the basis of the protected characteristic 'race', which refers to a group of people defined by their "race, colour, and nationality (including citizenship) ethnic or national origins".

Box 1: Protected characteristics under the Equality Act 2010

<http://www.legislation.gov.uk/ukpga/2010/15/section/4>

1. Age
2. Disability
3. Gender reassignment
4. Marriage and civil partnership
5. Pregnancy and maternity
6. Race
7. Religion and belief
8. Sex
9. Sexual orientation

Differential attainment is important. Fairness and equality are clearly crucial. The NHS relies on IMGs (1), over a third of UK medical students are from BME groups (13), and a diverse workforce can improve outcomes(14). If differential attainment reflects differences in clinical performance, there are potentially patient care implications. Performance in US examinations is positively correlated with performance in clinical practice (15-18) and disciplinary action is associated with lower prior performance in examinations (19). IMGs in the UK, US and Australia are more likely to be investigated for Fitness to Practice concerns (1) (19, 20) as are BME UK graduates (1). However two studies have found mortality rates in cardiac patients were lower for IMGs than for US medical graduates (21, 22) suggesting more work needs to be done to understand the relationship between exam and clinical performance in different groups (and in general).

Since the late 2000s, the GMC and UK Medical Royal Colleges have undertaken work to understand and reduce differential attainment, and the current project forms part of the GMC's expanding programme of work in this area (<http://www.gmc-uk.org/education/27486.asp>). The profile of differential attainment was raised when in 2013 the British Association of Physicians of Indian Origin (BAPIO) took the General Medical Council (GMC) and the Royal College of General Practitioners (RCGP) to court over lower pass rates of IMGs and BME doctors in the MRCGP examination (23), claiming they were failing in their public sector equality duty (24). In April 2014 Justice Mitting ruled the RCGP had not neglected its public sector equality duty but should act to reduce identified differences.

1.2.2 Causes of differential attainment

The causes of differential attainment are still poorly understood. A 2015 GMC-commissioned rapid review of the literature (25) highlighted a lack of consensus and research about the causes of differential attainment, but stated causal factors were likely to

operate at micro (individual), meso (institutional), and macro (policy) levels. The authors pointed out many researchers agree examiner unconscious bias or overt discrimination is unlikely to be the main cause of differential attainment in examinations in medicine because the effect is seen in written machine marked multiple choice examinations (26) and because research into two postgraduate clinical examinations found no evidence of bias (27, 28). This has focussed differential attainment research onto understanding experience and opportunities in training. This shift is reflected in a recent comprehensive Higher Education Funding Council England-commissioned report that explored the causal influences on ethnic differences in higher education (HE) (2). Four categories of causal explanations were identified (see Box 2), which can exert influence at micro, meso, and macro levels, and which move on our understanding from the “deficit model” whereby differences are attributed to deficits in students such as poorer previous attainment, lower motivation, poorer preparation for university (29, 30).

Box 2: Mountford-Zimar et al.’s (2) categories of factors causing differential attainment in higher education (including recruitment, retention, degree attainment, employment and further study outcomes). These factors can operate at macro, meso, and/or micro levels:

Students’ experiences of their HE learning, teaching, and assessment, the ‘curriculum’ in the broadest sense.

Relationships that underpin students’ experiences of HE; relationships amongst students and between students and their institutional environment and the staff that can either support or detract from the quality of the learning experiences.

Psycho-social and identity factors which might generate limitations to learning and attainment such as the expectations which academics have about students, and students have about themselves.

Cultural and social capital factors affecting the learning experiences of students and their engagement in learning which are related to their access to social and cultural capital including their familiar context and material resources and students’ possibilities for extra-curricular activities and support.

1.2.3 Risk and resilience

Differential attainment is about group differences, which ignores variation within groups. For example IMGs with very high Professional and Linguistic Assessment Board (PLAB) scores performed as well as UKGs in subsequent Annual Review of Competence and

Progression (ARCP) assessments (31). Regan de Bere et al (25) called for research to explore the experiences of BME and IMG doctors who have positive outcomes - an idea which can be understood in terms of resilience.

Psychological theories of resilience explore processes that protect people from experiencing negative outcomes in the face of significant risk (32, 33). Resilience does not imply better than average outcomes, just better outcomes compared to others experiencing similar levels of risk (34). See

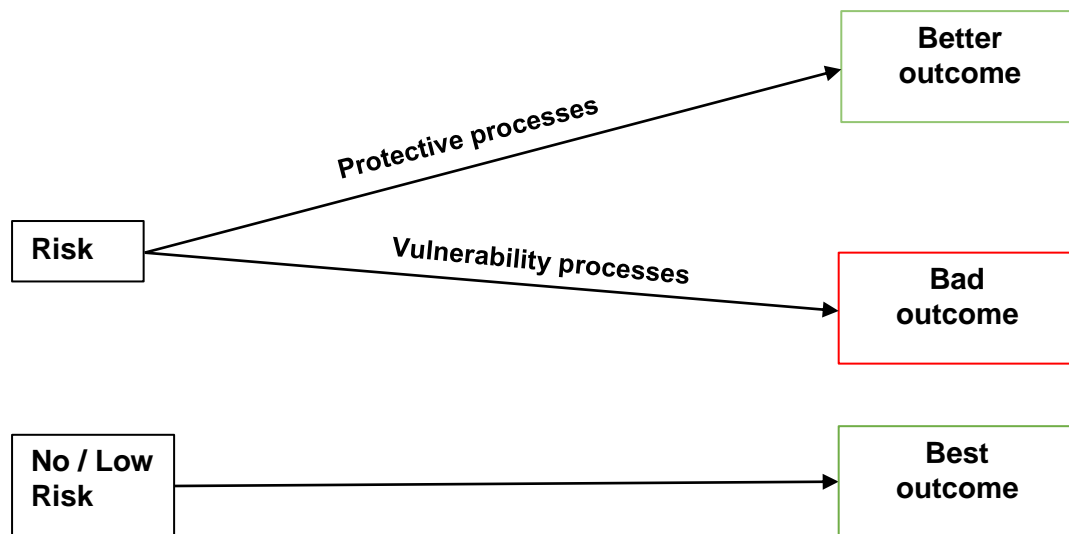


Figure 1. A model of resilience, based on Rutter (34)

Resilience emerged from developmental psychology to explain how children can have positive life outcomes such as good academic achievement in the face of significant risks such as childhood poverty (35). Resilience is sometimes misinterpreted as being a personal attribute but there is evidence that resilience is context-specific and can change markedly with circumstances (36, 37). Of interest are processes that change how individuals perceive themselves or the risk, and which change a person's life trajectory from negative to positive (32), which include:

- **'Steeling' effects:** Exposure to challenging situations with support and feedback increases resilience (34), possibly from increases in self-efficacy, knowledge and skills applicable to the challenge(s) faced, and/or in self-esteem from positive feedback.
- **Sense of belonging, self-efficacy and self-worth:** Brief social-psychological interventions to boost self-worth and increase belonging in BME students in the US improved their academic performance and their physical health compared to BME control students, by altering negative lifecourse trajectories (38, 39).
- **Autonomy, the ability to plan life events, and perceived control** over one's life and work (44, 45).

- **Personal relationships:** Good intimate relationships in adult life can bolster self-worth (34). Supportive relationships at work are also essential to learning through work (40, 41) and may have similar effects.
- **Self-complexity** (42, 43). Self-complexity refers to the number of different ways in which people see themselves, called self-aspects; e.g. in terms of their roles, belonging to groups, and relationships. Individuals with low self-complexity have similar self-aspects, so a negative event in one will spread to the others. High self-complexity can prevent that spread, buffering against stress and depression.

Medical training is stressful, challenging, and associated with mental health problems (43, 46-48) i.e. it is risky. IMGs can face particular challenges: learning a new work environment with different systems and different expectations, lack of support, language difficulties, settling into a new country, difficulties securing training positions and consultant jobs, and being stereotyped (49-51). Furthermore, medical student social networks are heavily influenced by ethnicity (52-54), and these networks can influence attainment (53). Similarly, relationships between learners and clinical teachers can be affected by ethnicity (53, 54) and lack of belonging has been identified as key in differential attainment in higher education (2, 38) – belonging being intrinsically linked to relationships. Experience of prejudice and membership of a negatively stereotyped group are also psychologically risky (55, 56) and can affect IMGs and BME UKGs (57, 58).

Framing these findings in terms of risks enables exploration of protective processes that help doctors achieve better outcomes. Resilience is not a panacea. Those experiencing the fewest risks are likely to have the best outcomes, and resilience cannot and should not need to overcome overt prejudice; however a better understanding of the risks faced by IMG and BME doctors and the processes enabling IMGs and BME doctors to be resilient will move us closer towards solutions to address differential attainment.

1.2.4 The junior doctor contract dispute

The current project was timely for studying resilience in medicine. Data were collected in November and December 2015 during the junior doctor contract dispute. In September and October 2015 doctors demonstrated in the street and on 19th November 2015 98% of the British Medical Association's 37 155 junior doctor members in England voted to strike (59), starting 12th January 2016. The dispute appears to be a focal point for dissatisfaction with Government changes to the NHS (60-62) and may have encouraged participants to speak about aspects of their training they felt needed improving or that they found difficult, but there is little to suggest that white and BME doctors or IMGs and UKGs view the concerns surrounding junior doctor contracts differently and so it does not invalidate findings.

2 Methodology

2.1 Methods

Qualitative focus groups and one-to-one telephone interviews using a semi-structured interview guide (see Appendix) ensured we asked similar questions of all participants but allowed us to explore particular areas of interest or importance that participants brought up.

2.2 Participant sampling framework and recruitment

We recruited trainees from four groups: BME UKGs, white UKGs, BME IMGs, and white IMGs.

Our case studies were six LETB's (four Deaneries) with different proportions of IMGs/UKGs, and varying average postgraduate examination performance: Kent Sussex and Surrey (HEKSS); London [North Central and East (HENCEL); North West (HENWL); South (HESL)]; Wales; Yorkshire and Humber (HEYH), as well as the corresponding Foundation Schools.

Across the whole sample we recruited from, six specialities with different competition ratios and different proportions of IMGs/UKGs and white/BME doctors: Medicine, Surgery, Psychiatry, General Practice, Clinical Radiology, and Obstetrics & Gynaecology, and Foundation.

Across the whole sample, we recruited doctors from Foundation, ST1-ST3, ST4+, doctors who had failed to progress, and doctors who had completed their training within the last year.

We recruited purposively from within our sampling frame. All participating LETB's/Deaneries and Foundation Schools sent emails inviting trainees and trainers to take part. We advertised in the Royal College of Physicians President's letter and at relevant meetings, and asked BAPIO and the Head of the SAS doctors Committee to ask people they knew who had failed to progress to take part.

Some participants took part after being approached by the researchers at scheduled training events but most emailed the research team and were then asked to complete a short online survey of their demographics and availability. They were invited to attend focus groups in their locality or if that was not possible, to be interviewed over the telephone. It was not feasible to interview everyone, so we chose participants to populate our sampling frame.

All participants were offered a certificate of participation and focus group members received refreshments in recompense for giving their time.

2.3 Analytic framework

We followed Mountford-Zimdars et al's (2) framework (see Box 2) adapting it to fit a workplace training medical context, and allowed themes and sub-themes to arise from the

data during analysis. To understand how and why experiences might lead to success or failure in BME UKG and IMG groups we explored which factors could be considered risks to progression, and which processes promoted resilience or made trainees more vulnerable to poor outcomes.

3 Results

3.1 Participants

392 trainees and trainers expressed interest in taking part. 330 (261 trainees; 69 trainers) completed a survey giving more details about themselves. 137 (96 trainees including 1 post-CCT & 1 who failed to progress; 41 trainers) took part. Data were gathered in November and December 2015 in 13 focus groups and 35 interviews with trainees and 3 focus groups and 14 interviews with trainers. See Figure 2 for participant demographics.

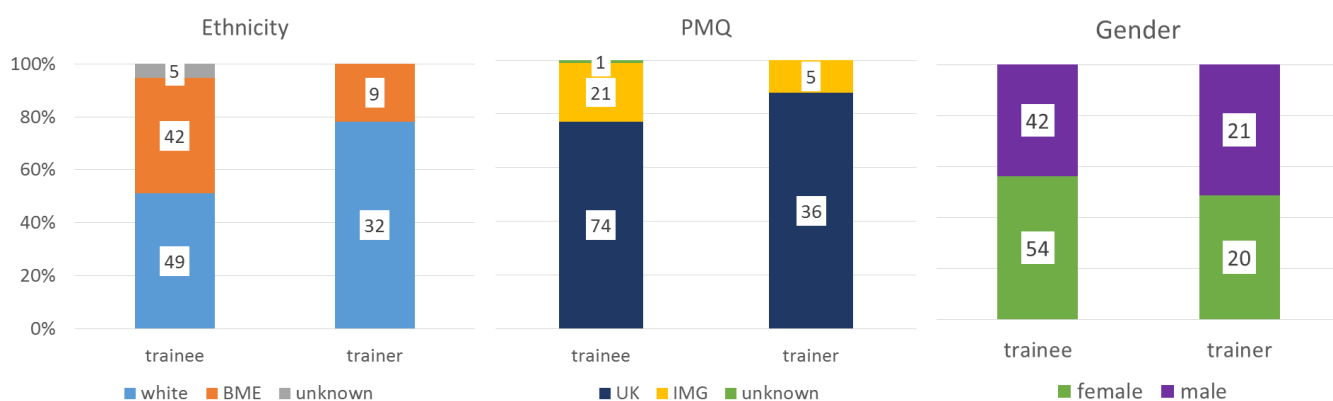


Figure 2. Participant demographics

3.2 Risks

Postgraduate medical training presented numerous risks. This section describes the particular risks – organised by theme – that BME UKGs and IMGs faced over and above other groups; and risks faced by women, older trainees, and trainees with dyslexia. Risks, vulnerability, and protective processes are summarised in section 3.3 and in Figures 3 and 4. Research question answers are given in section 3.4.

3.2.1 Curricula, teaching, learning, and assessment

3.2.1.1 Teaching and learning environment

3.2.1.1.1 Confidence to take responsibility

Trainees frequently worked in highly-pressurised environments without seniors present. Some felt these were their best learning opportunities, boosting confidence and making junior trainees “feel like a doctor for the first time”, but for others these were their worst experiences. Positive outcomes were more likely when trainees felt confident that they knew what to do and would be supported in their decision-making. Without confidence responsibility could lead to high stress and discourage trainees from continuing in that specialty or environment.

Some trainees talked about being inherently confident, however more often confidence depended on previous experience and directly related to relationships with seniors. Seniors boosted confidence by preparing trainees to deal with challenging situations beforehand, helping them reflect and gave them constructive feedback afterwards, and reassuring them about negative outcomes. When seniors did not believe in trainees' abilities, were bullying, blamed trainees, or were perceived not to care, trainees' confidence could be damaged, sometimes for months and could follow them into subsequent jobs. The same trainee could be treated positively by one senior and negatively by another, hugely affecting confidence and success.

Coming straight into the UK and into this particular hospital - from day 1 it was criticism. I had a college tutor walk up to me once and told me "Anaesthetics is not for everybody, you can get a job as a resident medical officer". So that stayed at the back of my mind for quite another 5, 6 months while I was there. It was getting unhealthy for me, I was getting a lot of psychological emotional stress, so I decided before I leave anaesthetics let me see if other hospitals are like that. [...] And within the first month of me working [at another hospital] [...] the college tutor there, called me and said "you seem to be not confident about anything, and we've had someone assess you, she thinks your skills are good [...] just relax and pay attention to the work". [laughs] [...] I decided to stay on with that encouragement, with a little bit of effort, and I went on to finish my final anaesthesia fellowship.

Black IMG Male ST1-3 GP

We didn't have SHOs, we didn't have registrars, we had staff grades and a consultant who was never around. I was constantly feeling like I wasn't sure if I was missing something, and I felt like that all the time. And no amount of sort of soul searching or reading books was helping me. What I took away from that, I wouldn't really call learning in the sense of being a junior doctor. [...] You felt like a fraud because you were the only person seeing these patients who were coming out of theatre. Some of them were becoming very very unwell, you had no idea what you were doing. You were calling the medical registrar who didn't expect to speak to someone so junior who was on their first job who didn't know what the hell they were talking about. [...] Me and my other F1 colleague, we were just desperate.

Asian Indian UKG Female GP ST1-3

BME UKGs and IMGs were less likely to report support from seniors in pressurised situations and more likely to say seniors did not believe in them. The trainee-trainer relationship was not such an important theme in the trainer interviews, although some trainers recognised the importance of their relationship with trainees to trainees' success, and three mentioned how important this was with IMG trainees.

I've had one trainee who I did feel lacked confidence when he first came to work with us on the Short Stay Unit. And I felt because he was with us for a year, the amount of time we had to train him was really valuable, and he learned a lot and he progressed a lot and his confidence grew. Because I was his supervisor, we had the continuity and he had a lot of positive feedback which built his confidence up, and then he passed his exams, and then he became a registrar and has gone into the speciality that he wanted to do. And he was an overseas trainee and he just needed a bit of luck, I think, and he was in the right place and that really helped him. [...] [That experience] made me a bit more aware of how important my role is.

Trainer White UKG Female Medicine

RISK (Micro; BME UKGs & IMGs): Less likely to report having support from seniors in dealing with challenging situations.

RISK (Micro, BME UKGs, IMGs): More likely to report that seniors do not believe in their abilities.

3.2.1.1.2 Lack of access to learning opportunities

Trainees from all groups spoke of variability in learning opportunities due to the rotations they happened to be doing and whether education was valued. IMGs and one foreign national UKG said difficulties getting a visa or being eligible for training positions prevented them getting jobs with good learning opportunities, including having to move deaneries half way through core training which prevented a trainee getting a run-through job. Two trainers mentioned these problems.

IMGs were more likely to report having worked as a locum before getting a training job. Some were demoralised by the poor training and job security those posts offered, but two IMGs said they had taught themselves and received more support during locums than in their training jobs, and an IMG said his determination to achieve his goals had prompted him to ask for supervision in a locum job.

IMGs in locum jobs could be perceived by UKGs as poor at communicating in English and/or not interested in education.

My experience probably comes from a lot of locum doctors who are trying to get more established in the UK. I think perhaps there may be less trust from a senior perspective to somebody coming into that environment and therefore you don't also give them the time to help support as much as you would somebody who is in a more permanent post here.

Trainer White UKG Female Medicine

RISK (Macro, Non-EEA IMGs and non-EEA UKGs): Visa and workforce planning restrictions on some training jobs.

RISK (Meso, IMGs): More likely report ending up in a locum position with poor training opportunities and being perceived as disinterested in education.

3.2.1.2 Fairness of assessments

3.2.1.2.1 Fairness of ARCPs

ARCPs varied between specialties, stage of training, and location, and UKGs were generally critical of them. White UKGs felt ARCPs relied on colleagues trusting them, signing them off at the last minute and completing their multi-source feedback positively, which they thought could disadvantage BME UKGs and IMGs who were less likely to “fit in”. IMGs tended to feel ARCPs were fair because all trainees have to tick the same boxes.

Everything has been from registrars who have generally said, “Yeah, I’ll just do one for you”. It’s not been a formalised thing. It’s basically been the same as the rugby tie, but rather than wearing a tie, I’ve just known them and get on with them.

White UKG Male ST1-3 GP

RISK (Micro, BME UKGs & IMGs): Potential for ARCP success to depend on good relationships with trainers from the same background as trainees.

One Asian UKG Surgical trainee suggested panels could be biased against black trainees, a female trainee described how her panel had a “token female” panel member who was “probably an administrator” (Asian Pakistani UKG Female ST4+ Surgery), another female trainee said ARCPs were not flexible enough to take account of those in Less Than Full Time training, and another female Surgical trainee spoke of gender discrimination:

I was only 10 weeks pregnant and I felt that I was under pressure to be forthcoming with the pregnancy and as soon as I came out with that, that completely changed the dynamic of the ARCP and not in my favour. [...] It was my first and I hope my only outcome that was not an outcome 1.

Asian UKG Female ST4+ Surgery

RISK (Micro, Meso, BME UKG, Women): ARCP panels in some specialties, especially hospital medicine, perceived to be potentially biased against trainees from BME backgrounds and women/people working Less Than Full Time.

Trainers were much more positive about ARCPs, although one O&G trainer thought they did not take account of trainees working Less Than Full Time. The main criticism from trainers was that ARCP panels passed trainees they shouldn’t.

If trainees have the other two legs in place it is likely that the panel will consider them trained and pass them.

Trainer White UKG Male GP

3.2.1.2.2 Fairness of Royal College examinations

Exams were generally perceived as more robust than ARCPs; however IMGs were more critical than UKGs. IMG and BME UKG trainees commented on how communication in clinical examinations was not the same as in real life and described learning to ‘play the game’ to pass, and one IMG said not being used to written exam format disadvantaged him. Confidence was perceived as important in clinical exams, but IMGs worried their accent

would disadvantage them. Exam stress was compounded for IMGs by the knowledge that they were statistically more likely to fail. Several trainees knew colleagues who were good in clinical practice who had failed, which made IMGs anxious because it suggested they might face discrimination. Two White UKGs suggested unconscious bias from examiners might work against BME UKGs and IMGs. Dyslexia was felt to impede written exam performance.

Reassurance from seniors was important in countering BME UKGs' and IMGs' anxiety before exams, and before retakes.

It can be really frustrating if you are a non-UK graduate and you know you speak in a different accent, let me put it that way. Because I've realised that sometimes your examiners may not hear what you say, and they may be a bit embarrassed to ask you to repeat what you say and just assume something [...] I realised that that was the only way to pass the exams – you have to act. You have to speak very slickly. [...] Once you get [the examiners] to like you they can pass you. It doesn't matter if your knowledge is rubbish.

Black IMG Male ST1-3 GP

M1: The exams themselves are hard, but also that is a bottleneck in training, the number of available posts decreases dramatically, and if you can't get through that exam you cannot progress your training at all. [...] So there's a lot of pressure to complete it and progress. The alternative is you can't progress, your training stops at that point.

M2: I'll second what [M1] has said, but additional problem for me has been I didn't do medical training MBBS in the UK. English isn't my first language and the one day CASC, which is the final exam in Psychiatry, I know that in the last 7, 8 years from the area that I worked in, there have been two trainees who are overseas graduates who have passed their exam at first attempt in the last 8 years. There have been two or three others who have done it in the second attempt, but many of them have not been able to pass that exam. So that was particularly challenging.

M1: White UKG Male ST4+ Psychiatry

M2: Asian Pakistani IMG Male ST4+ Psychiatry

One particular consultant who was very good and said - actually I think this was probably the second time I'd failed - and she wrote a letter to the College saying [...] "I'm happy with her clinically so this is not a reflection of her clinical abilities."

Black UKG Female ST4+ Medicine

Trainees varied in whether they felt examinations helped or hindered workplace learning. Most said that revising for and sitting examinations was an additional burden that they had to deal with on top of their day job, especially if they kept failing. Others said that examinations motivated them to learn. Most found failing knocked their confidence although some trainees said that although failing slowed them down it focussed their learning. Difficulty getting study leave for exams was also problematic, particularly in Trust jobs.

Trainers generally felt examinations were robust and fair (many were involved in examining), even if they were harder for candidates who were not familiar with UK culture and language, for example one trainer reported reassuring an Iraqi trainee that she would not be discriminated against, but that the exam was just harder for people from a non-UK cultural environment.

RISK (Micro, IMGs): Unfamiliarity with exam formats.

RISK (Micro, IMGs): Concern about discrimination in clinical exams.

RISK (Macro, BME UKGs and IMGs): Need to balance revision and taking postgraduate exams with work.

RISK (Meso, IMGs): IMGs more likely to be taking exams while in locum jobs with less educational support.

3.2.1.2.3 Fairness of Recruitment

Trainees and trainers believed unconscious bias in recruitment could disadvantage IMGs and BME UKGs who were less likely to be able to “fit in”. Trainers were perceived to be able to help IMG trainees in particular understand and get through the system. Two white UKG trainers said they had less confidence in the quality of training in some countries outside the UK and would need extra assurances about those doctors.

The employers are going to look for someone who can be well integrated in their team and they might not see that in you as an ethnic minority even though it's not something that they would outright say. That's why I always say it's very subtle. They might look for something else and blame it on that: “oh, it's because you don't have enough experience at this or that”. Even though your CV actually might match your colleague or even be better than your colleague's.

Black UKG Female Foundation

It felt like being favoured or unfavoured because I was an international medical graduate. [...] Nobody's going to honestly admit to that. But [my trainers] all understood that, and they supported in any other way they could by building up my CV, which is what helped, and I think they've been fantastic, otherwise I wouldn't be here.

Asian Other IMG Male ST4+ Surgery

If somebody had trained in another country and you didn't have confidence in the registration of that qualification in that country, the people are going to be to the same standard, you might be less happy to recruit people from that environment.

Trainer White UKG Male GP

There is the potential for recruitment to have bias for other reasons. These are human beings appointing other human beings so... Unconscious bias training is in place for example in my experience, but I don't know if it works.

Trainer Asian Indian UKG O&G

RISK (Micro, BME UKGs, IMGs): Perception that recruitment panels can be unconsciously biased against BME UKGs and IMGs.

RISK (Micro, BME UKGs, IMGs): Some UKG trainers reported less confidence in IMG trainees' abilities.

RISK (Meso, IMGs): Less experience of recruitment systems and requirements.

3.2.1.3 The hidden curriculum

3.2.1.3.1 Success and failure resulting from trainee qualities or deficiencies

Medicine was perceived as a vocation that required hard work, long hours and personal sacrifice. Trainees and trainers generally believed success or failure was largely determined by internal factors such as how motivated, proactive, and organised a trainee is, and trainers preferred teaching trainees who behaved like that; however trainees were more likely than trainers to acknowledge that the environment at work and at home could significantly affect learning and performance, and one BME IMG trainee explained that pushing oneself forward could be culturally inappropriate.

Back home if we are over-confident they think you're rude. Whereas here if you're overconfident you're taken as, knows what his stuff is and the people instantly like you.

Asian Indian IMG Male Radiology Post-CCT

The people that I've seen who are good, self-directed learners, it takes a lot to hinder progression and people will get through and will progress despite the deficiencies in the systems. So I think the main thing that hinders people is down to the individual learners themselves [...]. I suspect most of it is down to the individual.

Trainer White UKG Male GP

RISK (Meso, IMGs): Pushing oneself forward perceived as proactive in the UK but possibly culturally inappropriate for some IMGs.

RISK (Micro, BME UKGs, IMGs): Difficulties attributed to personal failings.

3.2.1.3.2 Fear of being perceived as weak and being labelled

Trainees talked of reputations following doctors from job to job, and how it could be difficult to shake a label, which made it hard to report bullying or other problems. Two Black UKGs said they had personally experienced prejudice from staff – one had reported it to her educational and clinical supervisors and “something was done”, and the other had not reported it because she wanted to “pick my battles”. Other trainees reported hearing of prejudice against BME UKGs.

If a junior trainee sees a problem there isn't much support when they go to their seniors, and that causes an impact both on your learning because they look at you as a trouble-maker. Because certainly one of the times when I did that I had the medical director interrogating me on the ward, and then going round and asking my colleagues whether I was a trouble maker and what I was about.

Mixed UKG Male ST1-3 Psychiatry. Failed to progress in another specialty.

It's better to say that you have never had a problem [with bullying]. Other people like me who had problems are now saying that it is better to say that you don't have a problem, never had one, because otherwise you will be labelled as the problematic trainee. No one wants to deal with you.

White IMG Female ST4+ Psychiatry

Because experiencing difficulties was perceived a sign of weakness and personal failing, trainees felt they were not always given the support needed to learn, and some felt blamed after experiencing problems they thought weren't their fault. This could be amplified for IMGs who were more likely to report seniors not believing in or trusting them. Stigma could prevent IMGs taking up offers of help, although one IMG reported asking for help and getting a negative response:

Just imagine someone starting on F2 being told to stay in an Acute Care bay, which is the really deep end. And so personally, I think I was mature when I came into the system - I think I was 36 or something - so know my boundaries, I know what I'm able to do and not able to do, and I know that I'm coming from a different system. For the next morning I called the consultant, it was a professor, and I told him that I struggled overnight, and unfortunately [...] the registrar was not very supportive that night, and I told him that I struggled overnight, I think I should be in a place where I could grow. [...]. But unfortunately that experience was misinterpreted [...] for being a weakness. [...] [My educational supervisor] told me that "Oh you need to go back to become an F1". [...] I was in tears.

Black IMG Male ST1-3 Medicine

I struggled in the first place to go for [talking therapy] when my trainer mentioned it. [...] And the funny thing is when I told my friends [other GPs from the same country] they said "Oh I've been there". I'm like, "Okay, but why didn't you tell me?". So everybody keeps it to themselves.

Black IMG Male ST1-3 GP

RISK (Macro, Micro, BME UKGs, IMGs): Potential for experiencing prejudice in the workplace.

RISK (Macro, BME UKGs, IMGs): Culture of difficulties caused by personal failings and fear of repercussions make it harder to report difficulties, including prejudice.

3.2.2 Trainee relationships at work

3.2.2.1 Relationships with senior doctors

Trainees felt relationships with senior doctors were crucial. As well as providing juniors with confidence to help them deal with difficult situations, including exam failure, and helping them build up their CVs, seniors could orchestrate opportunities for trainees to take responsibility. These opportunities led to positive outcomes when trainees felt seniors cared about their learning and believed in them, when seniors were available to help trainees reflect and give them constructive feedback, and when trainers made trainees feel valuable. Often these trainers were described as mentors and encouraged trainees to carry on in a particular specialty.

I wasn't there just to assist. I was there to assist him and learn from what he was doing so that one day I would be able to do the same as him. Actually, at one point during the time where we were sewing this patient up he became my assistant and I was sewing; and that was nice because I knew that he was there and he was watching and if at any point he needed to step in he would step in. And that made me feel like a doctor in training as opposed to a junior doctor that's just doing service provision.

Black UKG Female Foundation

Several trainees and trainers explained that cultural differences with IMGs could get in the way of good trainee-trainer relationships, one Black Foundation UKG said she had experienced bullying which she thought was race-related and she felt her ethnicity impeded her access to learning opportunities, although she also described a very positive learning experience with a senior in a different job (quoted above). Several white trainers suggested that some Asian doctors may have been pushed into medicine.

I don't have an English background. I don't have the same things to talk about other than movies that you have been watching when you were younger. [...]. [Work relationships] are also very much about personal interactions.

White IMG Female ST4+ Psychiatry

Cultural differences and negative stereotyping could be overcome with time and effort. Three white UKG trainers described how getting to know their IMG trainees over several months built trust and understanding and led to positive outcomes, whereas when the time wasn't there to get to know trainees, especially IMGs, this could impede learning.

A trainee who - I think often, with communication skills, with UK general practice and patient-centred consulting, for both personality and cultural reasons - really struggled with patient-centred communication and failed several exams. And something changed when we had some additional one-to-one tutorial time and actually pulled it right back and spoke about where he came from. [...] It made a huge difference to my understanding of him and also cemented a relationship of trust that I think helped us to work together.

Trainer White UKG Male GP

There were two countrymen, same overseas medical degree, and one I've worked with for the whole year [...] we really got to know each other. [...] I really understood his learning style and what- and we'd come to an agreement about how to feed back and how he wanted the feedback. And it went really well with him and not very well with his colleague. And I felt that if I'd been able to get to know [his colleague] a bit better and work with him we could have established the same positive interaction. [...] We shared a lot and I learnt a lot about his culture which I found fascinating and he was a poet, all sorts of things. So it was an enriching experience for both of us. And by the end he got through and it was obviously all his work.

Trainer White UKG Female GP

RISK (Micro, BME UKG, IMG): Cultural differences can impede relationships with trainers.

3.2.2.2 Relationships with peers

Peers provided practical support and advice, solidarity, understanding, and emotional support. Trainees tended to seek support from others within the same cultural group, including within the UKG group. UKGs describe organising opportunities to get together, physically or online, to share knowledge and provide emotional support and felt IMGs missed out on this; but many IMGs said they particularly valued the opportunity to meet other IMGs who could be trusted to understand and not to judge, and described helping junior IMG colleagues. One IMG thought he was unusual in making a particular effort to integrate because he thought it was so important, and another spoke of how reflecting on a negative experience with a "native" UKG had helped him realise the situation he had experienced was not a result of him being an IMG. Trainees liked organised events where they could meet peers, describing that as the most valuable aspect of formal teaching.

I've got a huge circle of friends now who have been trained in UK medical schools, either my medical school or others, because I've been brought up in the system. So if I have to do an exam I will send out a message to all my friends who have done that exam, who I might know of, or "do you know someone who knows this sort of thing". You've automatically got a huge network that you can call upon to get advice.

Asian Other UKG Female ST1-3 Medicine

Obviously you need to revise with your peers. And then if you don't know people it's quite difficult to find someone to revise with. [...] You feel better revising with people you're more comfortable with and have a relationship with.

White UKG ST1-3 GP

I had two colleagues who were actually very helpful because they are like me, they are international medical graduates, so they have already overcome all the challenges. So they are sympathetic to me. [...] Just for an example I was stuck with a patient, I don't know what to do. So they came over.'

Asian Bangladeshi IMG Male ST1-3GP

I'm [African nationality] and there was an Egyptian who is a consultant there, then another British person who is a consultant anaesthetist now. And when we met outside of there the first thing we all talked about was the experience of working there in the hospital and how horrible it was. [laughs] It wasn't just me, I just come across people of different nationalities, even someone who's native.

Black IMG Male ST1-3 GP

RISK (Micro, IMGs): UKGs perceived that IMGs missed out on learning that goes on when UKGs revise together.

3.2.2.3 Relationships with inter-professional colleagues, patients and deanery staff

Relationships with inter-professional colleagues could be valuable or detrimental. One IMG said nurses would assume that IMGs are "rubbish until proved otherwise" (Asian Bangladeshi Male ST1-3 GP) and a Black UKG said she had experienced racism from a nurse. White UKGs also described needing to prove themselves with nurses. White UKG GP trainers said trainees with good relationships with receptionists got to see better cases, and another said teams would give more "leeway" to trainees who had a nice way with practice staff. These relationships could be impeded by cultural differences and "preconceptions" (Trainer White UKG Male GP). Trainees rarely mentioned learning from positive relationships with individual patients, and trainees from all groups mentioned negative experiences with patients. IMGs, especially Psychiatry trainees said they had good relationships with patients, although one IMG GP trainee described how cultural differences had led to an altercation with the patient and his trainer had to get involved. Individual relationships with deanery staff were talked about fairly rarely, and seemed unrelated to ethnicity or PMQ.

RISK (Micro, IMGs): Potential for trainee-trainer relationship to be negatively affected if they perceive trainees to be struggling to relate to inter-professional colleagues, including for cultural reasons.

3.2.3 Psycho-social and identity

3.2.3.1 Fitting in and belonging

Trainees who enjoyed their jobs felt part of a functional well-organised multi-professional team in which they were valued. Moving jobs frequently meant relationships had to be formed quickly, and trainees were under pressure to prove themselves. This pressure was less when rotations occurred in one geographic area but could be greater in specialised tertiary centres. Some trainers said that they found it harder to assess their trainees' learning needs because they saw them rarely. This need to establish relationships quickly with doctors and multi-disciplinary team members was perceived as disadvantaging IMGs because cultural differences meant establishing good relationships could take longer, and as disadvantaging BME UKGs because they were less likely to "fit the mould". A BME UKG talked of being the only ethnic minority, and a BME IMG really appreciated a GMC event at which he got to meet inspirational IMGs, suggesting a lack of role models could impede belonging.

F1: There's still quite a lot of sponsorship that goes on. So rather than there being a meritocracy in terms of mentoring, certain trainees will be sponsored as the chosen ones. And those factors that define chosen ones can be varied depending on speciality, so they could include gender, ethnicity, where you went to school.

M1: Choice of sport.

F1: Who you're married to.

F2: What your accent is.

F1: All sorts of things, I've seen it all, it still goes on.

F1: White UKG Female ST4+ Medicine

F2: White UKG Female ST1-3 Medicine

M1: White UKG Male ST4+ Medicine

In 2005 there was a GMC supported event for overseas doctors. Fantastic event. [...] I was going through a lot of stress at the time. [...] It was a very good eye opener because I had lost hope that I'm not going to get anywhere. [...] I met people who have similar [backgrounds]. They said what you need to do to get around these things and get on with life. Me, if I talk to somebody who comes from India [...] he'll trust me more than anybody else just because I can tell him how the system is, "If you're honest, work hard, do all the things [you'll be ok]". That's [what] people told me on that day. They were mentors, directors from overseas [...] some were even thinking of applying for chief executive posts and they were saying "We are here. We are thinking of becoming chief executives. That's our aspiration".

Asian Indian IMG Male Radiology Post-CCT

RISK (Micro, Meso, BME UKGs, IMGs): Being seen as "different" can impede a trainee's ability to "fit in", especially in environments where judgements are made quickly.

RISK (Micro, BME UKGs, IMGs): Lack of role models could impede belonging.

RISK (Micro, IMGs): Cultural differences can impede relationships.

3.2.3.2 Prejudice and stereotype threat

3.2.3.2.1 Unconscious bias in training and recruitment

Reports of overt racism were rare; reports of overt sexism were more common, especially in Surgical specialties (described further below). Unconscious bias, "a subtle 'I feel more comfortable with this person'" (Black IMG Male ST1-3 Medicine) or subtle prejudice from seniors and other colleagues were widely considered problematic by trainees from all groups and was felt to be a probable cause of differential attainment, especially the differential between BME UKGs and white UKGs, and was thought to be particularly important in recruitment and in day-to-day learning, rather than in objective exams.

I had no problems in my five years of training. All ARCP 1, but it's a clear pass all through the five years. No problems, no complaints. But I had a few individuals I could make out in the very beginning of first meeting they made an opinion that "it's not good" or "it's not good enough". [...] It took a while for them to realise "Okay, he's okay to work with". But that bias shouldn't be there. It's unwarranted and it's not required.

Asian Indian IMG Male Radiology post-CCT

You are 35, you are from India, and he's 25, he's British medical graduate, he just passed the exam. And though your [recruitment] score is the same, who will get the job? [...] This is the reality, it's happening everywhere.

Asian Bangladeshi IMG Male ST1-3 GP

I was with a GP a couple of weeks ago having a coffee with him. He's like, "Oh, yeah, normally when we recruit people we look at whether they're going to mingle with us, they're going to gel with the kind of background we are, whether they can come to barbecues with my family". I thought to myself, "That is what my dad had to experience when he first came to this country and was rejected by society".

Pakistani UKG Female ST1-3 GP

Without a doubt favouritism and different attitudes that consultants will have to trainees, whether it's based on anything from gender to personality to enthusiasm, possibly even casual racism and comments - that can certainly impact how trainees respond and how clinicians view them and support them.

'Ethnic minority'¹ UKG Male ST4+ Psychiatry

While many trainers did acknowledge that unconscious bias could exist, white trainers were most likely to say medicine was relatively unbiased. A GP trainer said that he felt as a white UK male he had the fewest opportunities, and that GP was especially successful at integrating people from different backgrounds and this wasn't recognised (Trainer White UKG GP). By contrast, a BME trainer said "you are probably less likely to be successful the more different you are from the people assessing you" but that she had never experienced racism because she had always been one of the top performers and was from a high socioeconomic background, which was a "mitigating factor" (Trainer Black UKG Medicine).

RISK (Micro, BME UKGs, IMGs): Perceptions that senior doctors can favour those who are like them, which could disadvantage BME UKGs and IMGs.

RISK (Micro, BME UKGs, IMGs): BME UKGs and IMGs perceived as at risk from being discriminated against because of unconscious bias in recruitment and day-to-day learning. This was also perceived to affect IMGs in exams.

RISK (Micro, BME UKGs, IMGs): Trainers less likely than trainees to acknowledge the potential for BME UKGs and IMGs to experience discrimination as a result of unconscious bias.

3.2.3.2.2 Stereotype threat

Many IMGs and two BME UKGs talked about the pressure of knowing that they may be subject to discrimination or failure. IMGs talked of having to work extra hard just to keep up, and one wondered whether "we just aren't as clever as the local trainees" (Asian Other IMG Male ST4+ Surgery). Some trainers recognised this and reassured trainees.

¹ Term used by participant to describe his ethnicity

During my training I have seen lots of local trainees or white doctors, they are not doing that much work, and then in fact the other doctors - we are immigrant doctors - they have been given more work to do, and then they still do it, but they are still considered inefficient. [...] We need to work twice as much as, twice as hard as the local trainees does to be half as good as they are.

Asian Pakistani IMG Female ST1-3 Psychiatry

I should work five times harder [than locally trained graduates].

Black IMG Male ST1-3 Medicine

I'm expecting to get a lower mark because I'm- I know it's a stupid way of thinking but actually it got to the point where I was thinking "What is it? Am I...?" I wasn't sure if it was my knowledge anymore, I wasn't sure if it was my confidence, I wasn't sure if it was my skin colour. So you start-I think it creates almost like a nasty way of thinking and how you perceive yourself to be. And if that someone's expectation of you is low, subconsciously your performance will be low.

Black UKG Female ST4+ Psychiatry

RISK (Micro, BME UKGs, IMGs): Anxiety at the prospect of discrimination.

RISK (Micro, BME UKGs, IMGs): Anxiety from being statistically more likely to fail exams.

RISK (Micro, IMGs): Perception of needing to work harder than UKGs to keep up.

3.2.3.3 Impact of work on wellbeing

BME UKGs and IMGs were more likely to mention mental health problems caused by work. Stresses included relationships with seniors or other colleagues that lowered confidence and self-efficacy, burnout, social isolation, and lack of support from work in coping with problems outside work.

F1: I feel like on constant level of burnout [...] So unless I either declare myself- if I say I've actually got depression and I'm unfit to practice, then there is no way. I've been quiet before about...

F2: [...] I was at the point, like everyone is, when they're working where just an entire 3 months of just not sleeping at night because you're just so worried about the next day and how you're going to manage.

F1: Asian Indian UKG Female ST1-3 Psychiatry

F2: Asian Indian UKG Female ST1-3 Medicine

I did not have any work experience, neither back home nor here. And also my Foundation training was up North and then I left my daughter and my husband here in London. [...] I was really anxious during that time.[...] I could not pay attention to what was going on. [...] [My educational supervisor] said "Okay, if you cannot work like this then probably you need to, you may need to think about changing your career" [...] Medicine has always been my passion. I cannot think doing anything else apart from that. I got really upset.'

Asian Pakistani IMG Female ST1-3 Psychiatry

RISK (Macro, Micro, BME UKGs, IMGs): Anxiety or depression as a result of work.

3.2.3.4 Age

Older age was felt to confer greater maturity, enhanced confidence and motivation for learning, but older trainees said they had greater work-life balance conflicts and one trainee spoke of feeling too tired to learn and due to consecutive night shifts and “was just existing for long periods of time” and that relationships with younger trainees were more difficult. (White UKG Female ST1-3 GP). One BME IMG trainee said older IMG trainees were less likely to be recruited.

RISK (Meso, Older trainees): Long hours are more tiring.

RISK (Macro, Micro, Older IMG trainees): More likely to face prejudice in recruitment.

3.2.3.5 Gender

Many trainees had experienced overt sexism and negative attitudes and inflexibility towards pregnancy, maternity leave, having children, and working part-time. Male-dominated Surgery was considered especially bad with maternity leave being “a dirty word” (Asian UKG Female ST4+ Surgery). Medicine was also perceived as very inflexible. General Practice was felt to be more family-friendly, which is why many trainees chose it. Psychiatry was felt by some to be a family-friendly hospital specialty, although there were still “battles” to be fought. Training found having role models who successfully managed family and work, and flexibility from Deaneries to support part-time work, beneficial.

Three trainers acknowledged potential gender issues: ARCPs being unsuited to trainees working less-than-full-time, lack of female role models, and lack of flexibility to deal with family life. One male white UKG GP trainer spoke of the “gender bias” that women did better than men in exams.

F1: I’ve worked less than full time for 4 years, and I just work less than full time in a full time post. It’s fine. The service has to adapt to it, sure but only a little bit.

F2: I think part of the problem though, some of the medical specialities, they’re not so used to it [...] A few colleagues have said they’re seen as a real inconvenience [...] And when colleagues have tried to say “please can I come off the night rota doing 13 hour medical registrar shifts when I’m 30 weeks pregnant?”, you’re seen as that’s a real inconvenience.

F1: Oh yeah, that’s a massive battle.

F1: White UKG Female ST4+ Psychiatry

F2: White UKG Female ST4+ Medicine

I needed to learn how to do laparoscopic sterilization and the consultant before we went in to do the case was very hostile towards me [...] “How come I’ve got to that stage in my training and I’ve got children already? Was that appropriate to have children when I was at that level? How come I haven’t been signed off for this particular procedure already?” [...] I was in such a kind of emotional wreck by that point that I was completely incapable of learning anything. I couldn’t even function at a basic level.

White UKG Female ST4+ O&G

I hear [consultants] who come out with remarks that amount to- and I think I'm pretty much quoting verbatim, "I would never hire a female registrar if I could help it".
Asian UKG Female ST4+ Surgery

We walked past a patient and then the [Urology] registrar would say to me after we walked past 'Oh look at the baps on that'.

White UKG Female ST1-3 Medicine

I've had people say to me, so "You're either a woman or a neurosurgeon, you can't be both" [...] It made me lose the passion for my specialty and for my job."

Asian Pakistani UKG Female ST4+ Surgery

RISK (Meso, Macro, Women): More likely to report having to choose between work and children. General Practice was perceived as more family-friendly than hospital specialties.

RISK (Meso, Women): More likely to be put off hospital medicine by the perceived inflexibility and sexism.

RISK (Micro, Meso, Women): More likely to report experiencing sexism, especially in Surgery.

3.2.4 Capital

3.2.4.1 Cultural capital

3.2.4.1.1 Adjusting to UK cultural norms and language

It was generally agreed that IMGs who found it difficult to adapt to UK patient-centred care and who - even if they spoke English a first language - struggled with colloquialisms would struggle in clinical examinations and with colleagues. UKGs felt they would struggle with patients too. One white UKG trainee explained how "embarrassing" it had been when a Greek and a Pakistani doctor who spoke good English couldn't understand a joke a patient made (White UKG Male Foundation) and several trainers had difficulties teaching trainees who behaved culturally inappropriately with patients and colleagues. Although many IMGs commented that the patient-centred focus in the UK differs is different, several IMGs said that cultural difficulties in background and the medical hierarchy affected their relationships with colleagues more than with patients.

The two things which I learnt while working in here is about the importance of communication skills, and also working in a team. I did not have any previous experience working back home where I am originally from. But during medical school basically the doctors hold the main responsibility, and the nursing staff and others - back home - they are just doing what they have been asked to do.

Asian Pakistani IMG Female ST1-3 Psychiatry

IMGs talked of how it could take years to learn cultural norms especially if they had to 'unlearn' previously acquired knowledge. Two IMG trainees said they had learned most by talking to British people and watching British television and one also said she had watched a very useful video made by a consultant that explained that in the UK the "patient is King"

and should be treated “almost as if you would treat family” whereas that approach would make her appear incompetent in her native country (Black IMG Female ST4+ Psychiatry). One IMG said he had noticed that IMGs generally don’t make a special effort to immerse themselves in the culture, including socialising outside of work, and this could be a problem.

I’ve been in this country for more than a decade now. It’s still a learning journey [...] I personally think that maybe there must be some time given us to relearn what we have learnt already and then learn what we are supposed to learn.

Asian Indian IMG Female ST4+ Psychiatry

I wanted to immerse myself in not just the NHS and the system but also in the culture around me. And sometimes when people come from different backgrounds and they don't. I think it's a negative if they don't do that. It was a conscious decision on my part to try as much as possible to immerse myself in the [NHS] system and in the culture round me and when you don't do that, it makes it harder. So I know of experiences of a doctor who have come and it's all been about keeping in within their own group and not socialising or getting out [...]. I think that happens quite a lot.

Black IMG Male ST1-3 GP

RISK (Macro, Micro, IMGs): Linguistic difficulties and cultural differences can impede relationships with colleagues and patients.

RISK (Micro, IMGs): Cultural difficulties perceived to take a long time to overcome.

IMG trainees often felt their additional needs were not recognised by UKG trainers:

When you are qualified from outside, there are too many differences. [...] People who will be able to support you [are] mainly people who went through the same process, rather than people who qualified from the UK. They had all their training in the UK so they don't know what actually problems you face when it comes to the consultants who came from abroad and they studied the same process as you did, they know what problems you are facing and they try to support you with this more.

Asian IMG Female ST1-3 Medicine

A white UKG trainee thought IMGs could lack support from trainers who felt “international doctors are not their problem because they'll be with them for four months and then move onto somewhere else and so [trainers] don't address issues. And the only way that [international doctors] really get identified as having a problem is once they've failed exams a number of times” (White UKG Female ST4+ Medicine). Trainers also reported finding it challenging to help some IMGs. For example, a BME IMG trainer said how difficult it had been to help a trainee overcome cultural differences and another white UKG wondered whether sometimes differences were so large they could not be overcome. Only one trainer, a BME UKG, thought more effort could be made to help IMGs adjust.

If you make lots and lots of exceptions for somebody where they don't really have the capacity to change their cultural way in which they see the world, and their language skills haven't improved that much in five years, and you say “Well, we'll push you and you can just get over that bar” you just wonder whether they go on to specialty training then whether they're always going to be starting so far below the level that they need to be at and may continue to lose pace with their peers whether or not it's going to be an issue for them more and more as time goes on.

Trainer White UKG Male GP

RISK (Micro, IMGs): Perception among trainees that trainers do not understand, acknowledge or are not sympathetic to cultural and linguistic difficulties faced by IMGs.

RISK (Micro, IMGs): Perception among trainers that they were not able to do much to help IMGs deal with cultural and linguistic difficulties.

3.2.4.1.2 Accent

Many IMGs felt their accent made people immediately question their ability, made them less likely to be recruited and more likely to fail exams. Some BME UKGs remarked that it was because they spoke with middle class accents and went to a medical school with a good reputation that they fitted in and didn't suffer discrimination. Trainees and trainers said speaking fluently and confidently helped in exams and recruitment.

I'll tell you just a quick anecdote about a girl who wants to do [surgical specialty] now, who works in my department at home. And I spoke with her the other day to help her with her application form. And someone had taken her aside, in my department, who was a senior consultant and said to her [...] “[Interviewee] has got in but you don't speak like her and you don't look like her and you don't have her academic background, so you're not really what they're probably going to want, so I wouldn't get your hopes up”. [...] I happened to be raised in West London, [...] I'm Anglicised enough that it doesn't make a difference. But this girl has been raised in Bradford and wears a headscarf. [...] I speak with a very classical English accent and so people don't necessarily see me the same as any other ethnic minority person. [...] I realised very early on that I had to fit that mould and speak the way they want you to speak, present yourself in a way that they want you to present.

Asian UKG Female Foundation

The people who answer questions very confidently are much more likely to end up with a job just because, if they say the right things and say them confidently people are going to think “Yes you'll make a good doctor” whereas if you're very flustered and not very confident but actually do say the right things, well we actually try and mark them as well but I find they are much less likely to get through.

Trainer White UKG Female O&G

RISK (Micro, BME UKGs, IMGs): Perception that having an accent that was not middle class and British marked trainees out as different and inferior.

RISK (Micro, BME UKGs, IMGs): Trainees who do not speak confidently and fluently can be marked down in recruitment.

3.2.4.2 Educational capital: Quality of medical school training

IMGs may not have had an undergraduate training that prepared them for postgraduate training, especially in communication skills. One BME IMG trainer said she was fine because her training in a Middle Eastern country was in English and followed Oxford textbooks, but others who weren't taught in English could struggle. UKGs were concerned that IMGs may have graduated from medical schools where the standard was lower and one Radiology trainer mentioned potential lack of access to technological equipment in developing countries. A white UKG trainer was concerned some overseas medical schools accepted people who could pay rather than those who were motivated and able. Another white UKG trainer said that her lack of knowledge about training in other countries meant she didn't always trust IMGs' abilities:

I just feel a little bit unnerved when somebody hasn't trained here.

Trainer White UKG Female Medicine

RISK (Macro, Meso, Micro, IMG): Perception from UKG trainees and trainers that IMGs may have had inferior prior training resulting in less trust in their ability.

RISK (Meso, IMG): Medical school training does not necessarily prepare for postgraduate training in the UK.

3.2.4.3 Social capital

3.2.4.3.1 Relationships with family and friends outside work and work-life balance

Trainees valued emotional and practical support from partners and families especially when having difficulties at work; but long hours, inflexible training, and a perceived lack of understanding from trainers and the system about the importance of life outside medicine made it hard to get this support. Trainees lacked autonomy about where they worked and lived, especially those who did not score as highly at medical school or in recruitment tests, which is perhaps why BME UKGs and IMGs talked more frequently about ending up somewhere they hadn't wanted to be and the pressures this entailed. Trainers hardly mentioned these issues.

You can't be a person and a doctor [laughs]

Mixed UKG Male ST1-3 Psychiatry

I walk in the door and get a cuddle and a smile from my son [...] and that would make the rest of life worth living and the fact that you perhaps were having difficult trainers a lot more manageable because you could accept that your job was being made miserable because of the rest of life outside work was happy.

Asian Other UKG Male ST4+ Surgery

Needing fertility treatment was something. I couldn't conceive of rocking up to hospital every day for two weeks trying to get there and explain to people why I needed to leave the ward for two hours to go and get a scan every day for two weeks. And feeling I have to take a year out of training to achieve that, it's bonkers.

Asian Indian UKG Female ST4+ Medicine

I did nothing for some time. I was going to do orthopaedics but the training wasn't that easy to get in, so-and the family pressures, and that made me to a lovely change to general practice. [...] My first child was born 26 weeks and he was premature. And then lots of hospital appointments so we have been in hospital for five months and so my wife had to take time off work and I had to think about what I would do to just be close to home and to support her.

Black IMG Male ST1-3 GP

M1: The year apart. We've tried a year so I deferred for a year but still couldn't start and all my wife and kids couldn't move up. We spent a year commuting from Sheffield to Bristol. [...]

M2: You can't give up a [training] number, that's just a golden ticket. It's really career or family sometimes. It's tough.

M1: Arab UKG Male ST4+ Surgery

M2: White IMG Male ST4+ Surgery

If I don't get transferred over [to another LETB], I think I will be at the point where I will have to think of resigning from the job, because me and my husband, we have lived apart - my daughter, my eldest daughter now she's going to be six in January, she will be eighteen months old - and we've lived apart for two years just because I had started my training and he was doing LATs. And it was a three hour commute one-way every weekend for him. But then again, it was hard for me as well, with the younger child and then living apart in a country where literally this is just us as a family, we don't have much relatives around.

Asian Pakistani IMG Female ST4+

RISK (Macro, Meso, Women): Perceived lack of autonomy regarding important life events such as having children.

RISK (Macro, Meso, Women): Perception of having to choose between family and work

RISK (Macro, Micro, BME UKGs, IMGs): Lower recruitment scores increases the risk of perceived lack of control over fundamental issues such as where to live, when and whether to have children, and whether to be with family and friends.

RISK (Macro, Meso, Micro, BME UKGs, IMGs): More likely to report being separated from partners and children, meaning pain of separation and lack of emotional support outside work, and increased mental health problems.

RISK (Macro, Non-EEA IMGs and Non-EEA national UKGs): Visa requirements can make moving more difficult and expensive.

3.2.4.3.2 Institutional support for trainees

Learning support available from Deaneries/LETB's and Trusts appeared to vary. Some reported good support, such as teaching which helped them reach the next stage in their career:

In the assessments, I don't think there's been any hurdles as well [as in recruitment], because they've got a very good system of working out how we do our assessments. There's a dedicated Wednesday morning to do that every month, so you've got to make sure that you have your assessments during that period and then you've got a consultant named for it as well. So there's no hurdle in that, so I think the system it works very well for me.

Asian Pakistani IMG Female ST4+ Medicine

Others reported that support, especially inductions, could vary from job to job and furthermore, when support was offered, trainees varied in how much they profited from it. IMGs were more likely to say that inductions, when they occurred, were good opportunities to meet other IMG whereas UKGs appreciated learning clinical and practical knowledge at inductions.

One IMG trainee described battling to take study leave despite being in a training job, and a trainer explained how Trusts could do more to support trainees with study leave and financial support:

There could be more support in helping [trainees] with exams. More than often it's difficult to get the study leave, it might be, you know, they get the time off for the day of the exam but it's difficult to get study leave beforehand. These days Trusts can't really help with the money for exams which again they used to help a bit with.

Trainer Asian Indian UKG Female O&G

One IMG and a BME UKG London trainee mentioned help and resources from the Professional Support Unit (PSU) in terms of courses, but trainers said the Welsh PSU could be geographically difficult to access, and that “something's got to be wrong before you get there” (Trainer White Irish UKG Male GP).

The largest variations in support offered seemed to be between Trust/locum and training jobs. Even if a job was advertised as including education it didn't always and trainees – most commonly IMGs – reported fighting to get supervision and time off for exams and interviews.

Pastoral support from Trusts and Deaneries was valued and didn't seem to vary by ethnicity or PMQ.

RISK (Meso, IMGs): Variability in support offered and accessible to help IMGs adjust to new cultural and work environments.

RISK (Meso, IMGs): Variability in support, for example, study leave, offered to doctors in non-training jobs.

IMGs could feel stigmatised by requirements to attend extra courses. One IMG said extra courses for IMGs would mean time away from clinical work, making consultants less likely to employ them. Another had not taken up support because of stigma. Another had been

“blamed” for not attending courses he was expected to as an IMG. A White UKG said a language course was cancelled because of poor uptake. One IMG appreciated an induction tailored to help overseas doctors that all F1s also attended in part. However one white IMG would like an organisation that helped IMGs build their CV, apply for jobs, and so on.

3.2.4.4 Financial capital: Money

The most frequently mentioned financial burden on trainees were Royal College exams including fees, travel, accommodation, and accessing question banks and courses. Costs varied between specialties. Exam costs adds an extra pressure to pass but UKGs were more likely to talk about this than IMGs whose main concern was the lack of confidence failing brought. Some IMGs had to pay for visas for themselves and family members and one trainee spoke of spending his life savings on visas just to move to a different part of Wales.

RISK (Macro, Non-EEA IMG and Non-EEA-national UKGs): Cost of visas could be very high for IMGs and non-national UKGs.

RISK (Micro, BME UKGs, IMGs): Cost of repeating exams can add stress.

3.3 Summary of risks, and vulnerability and protective processes

Tables 1 and 2 summarise the risks and vulnerability processes and protective processes for BME UKGs, IMGs and women. Protective processes may mitigate against more than one risk and may work in opposition to a vulnerability process. Risks and vulnerabilities and protective processes may also be highly interrelated. This complexity is illustrated in Figures 3 and 4.

Table 1. Summary of risks and vulnerability processes for IMGs, BME UKGs, and women.

Risk/vulnerability process	Level	Groups affected
Poorer relationships with seniors and problems fitting in at work because of identity and cultural differences can lead to fewer learning opportunities, lower confidence , and increased chance of mental health problems .	Micro, Meso. Interpersonal; variable by specialty & location.	BME UKG, IMG, Women
Perception of unconscious bias and anxiety about discrimination . Also a risk for women in Surgery.	Micro, Meso. Interpersonal. Variable by job & specialty.	BME UKG, IMG, Women
Potential lack of recognition from trainers about the effect additional stressors can have, partly because medicine emphasises personal responsibility .	Micro. Interpersonal.	BME UKG, IMG
Poorer performance can lower confidence and mean less autonomy in job choice , increased separation from family and support networks and increased mental health problems . Perception that revising for retakes interferes with workplace learning .	Micro, Meso. Interpersonal. Variable by specialty & location.	BME UKG, IMG
Fear of being labelled as problematic can impede reporting of racism.	Micro, Meso, Macro. Interpersonal. Variable by location & specialty. Culture of medicine.	BME UKG, IMG, Women
Inexperience with UK assessments, recruitment, UK cultural norms including communication, and NHS/work systems .	Meso. Variable by country, medical school, & potentially specialty	IMG
Concern from IMGs that cultural norms can take a long time to learn and that this is not recognised by trainers. Some trainers perceive IMGs' cultural differences cannot change .	Micro, Meso. Interpersonal. Variable by country of PMQ.	IMGs
Potential for trainers to lack confidence in IMGs' prior training can lead to fewer training opportunities and less trusting work relationships .	Micro. Interpersonal.	IMG
IMGs in locum Trust jobs potentially negatively stereotyped as poor at communicating and disinterested in education. Poor educational experiences in Trust jobs may lead to poor exam and recruitment outcomes, lowering confidence .	Micro, Macro. Nationally or specialty/location-imposed job restrictions. Stereotyping at interpersonal level.	IMG
Stigma around seeking or taking advantage of supplementary help .	Meso, Macro. Variable by location. Culture of medicine.	IMG
Anxiety because of knowledge that IMGs are more likely to fail exams .	Micro. Interpersonal.	IMGs
Difficulties and costs in getting visas and being eligible for jobs with good training in desired locations can increase separation from family and support networks , and increase chances of mental health problems .	Meso, Macro. Visas determined by national policy. Eligibility for jobs variable by specialty.	IMG
Lack of family-friendly work practices can impede work-life balance and planning important life events .	Macro, Meso. Variable by specialty. Culture of medicine.	Women

Table 2. **Summary of protective processes for IMGs, BME UKGs, and women. These may protect against more than one risk.**

Protective process	Level	Groups affected
Trainers having time to get to know trainees can increase trust, understanding, and confidence , especially for IMGs where cultural differences might impede relationships forming quickly.	Micro. Interpersonal.	IMG
Trainers telling trainees they have faith in their abilities can help them relax and concentrate on learning.	Micro. Interpersonal.	BME UKG, IMG
Trainers helping trainees overcome exam anxiety - including anxiety about discrimination – can increase confidence and performance.	Micro. Interpersonal.	BME UKG, IMG
Trainers providing tailored advice about CVs and job applications or who explained UK cultural norms , especially for IMGs.	Micro. Interpersonal.	IMG
Support from family and friends outside work helped trainees who were having difficulties at work including bullying and exam failure.	Micro. Interpersonal.	BME UKG, IMG, Women
Good relationships between trainees from different cultural groups helps trainees realise problems are not due to discrimination or their own failings, and provides emotional and practical support . Facilitated by deaneries, Trusts, GP practices, and other institutions.	Micro, Meso. Interpersonal. Determined locally.	BME UKG, IMG
IMGs reported valuing meeting other IMGs who they felt understood them and would not judge them.	Micro. Interpersonal.	IMGs.
Role models who were aspirational, had succeeded, and could give advice.	Micro, Meso. Interpersonal. Variable by specialty	BME UKGs, IMGs, Women
Deaneries, clinical supervisors and educational supervisors could help deal with problems e.g. bullying, racism, health and other personal problems.	Micro, Meso. Interpersonal. Variable by location.	BME UKGs, IMGs, Women
Deaneries being supportive of flexible working could help pregnant trainees and those with children or other caring responsibilities achieve work-life balance.	Meso, Variable by specialty and location	Women
Online resources: One IMG said a video made by a consultant had helped her understand the doctor-patient relationship in the UK.	Meso. Potentially variable by specialty and location.	IMGs.
Keeping in mind their love of medicine and their goals helped keep trainees motivated and fight for what they needed to progress.	Micro. Interpersonal.	
Framing of challenges as opportunities e.g. exam failure as an opportunity to learn.	Micro. Interpersonal.	

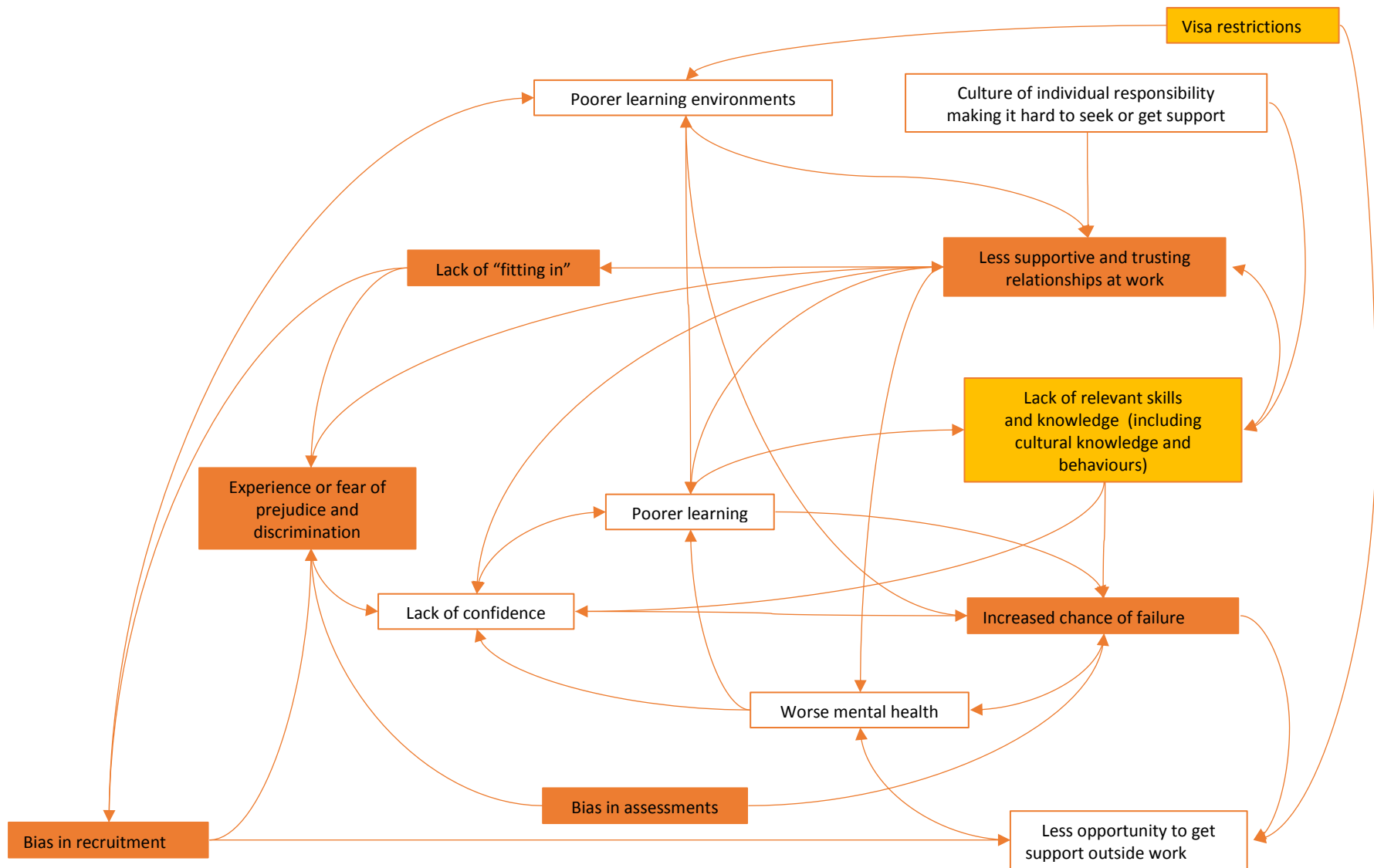


Figure 3. The complex interrelations between risks and vulnerability processes for all trainees. Those in orange could affect BME UKGS and IMGs. Those in yellow relate particularly to IMGs.

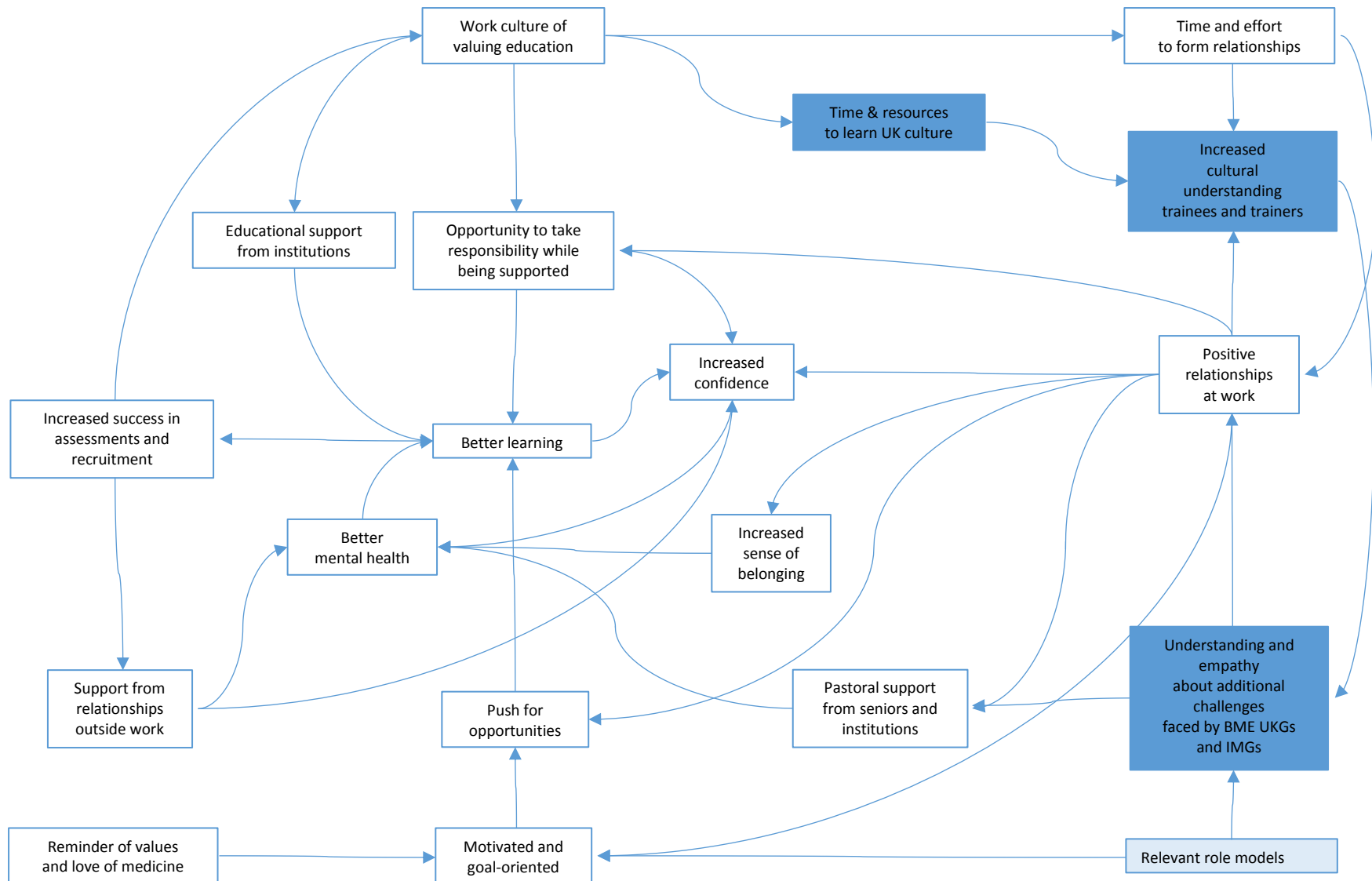


Figure 4. The complex interrelations between potential protective processes that help trainees from all groups achieve more positive outcomes. Those in dark blue relate specifically to IMGs and the one in light blue to BME UKGs and IMGs.

3.4 Research question answers

1) What does a supportive learning environment for post-graduate trainees involve?

The best environments:

- were well-organised and safe for patients.
- had functional multi-disciplinary teams with good morale.
- gave trainees novel clinical opportunities to help them develop their interests and to complete their e-portfolios and/or pass their exams.
- gave trainees appropriate levels of responsibility for their grade.
- had good support for educational activities e.g. study leave, well-organised useful teaching, e.g. bringing in juniors who had recently passed exams to brief trainees.
- had supervisors who had time to teach, encouraged trainees to ask questions, provided opportunities to take responsibility, prepared trainees to take responsibility, provided constructive feedback, provided practical or emotional support before trainees took/re-took exams, valued trainees' work, demonstrated belief in trainees' abilities, provided pastoral support.
- had role models who trainees found inspiring.
- enabled trainees to learn from and emotionally support each other.
- were flexible enough for trainees to have a work-life balance, including working part-time, leaving on time, taking maternity and paternity leave.
- had good pastoral support from trainers and Deaneries/Trusts/Practices.
- IMGs, BME UKGs, and women benefitted from inclusive environments in which 'difference' was not perceived as problematic.

2) How, if at all, could the current support provided to trainees be improved?

Training environments provided variable support. The two most important factors were: 1) organisation of the ward or practice; 2) trainee-trainer relationships. **Improving the organisation of the local learning environment and encouraging trainers to realise how crucial their behaviour is to trainees' learning could improve environments.**

IMGs would benefit from feeling their trainers understood and took into account additional needs in adapting to new working environments, a new culture, and a new way of learning and being assessed; being separated from family and support networks; anxiety about failure/being discriminated against in recruitment and exams. Supplementary training needs to be provided in a way that is not stigmatising.

BME UKGs, IMGs, and women would benefit from (more) visible role models who had successfully negotiated the additional challenges they faced.

BME UKGs, IMGs, and women would benefit if they were less subject to what they perceived as prejudice from colleagues.

Women, BME UKGs, and IMGs would benefit from more flexible working arrangements.

3) What are the key challenges that trainees have to negotiate in order to successfully progress through recruitment, Annual Reviews of Competence Progression (ARCPs) and exams?

To successfully progress trainees have to:

- get advice and information from seniors and peers.
- get their competencies signed off, by having appropriate clinical opportunities, good relationships with seniors and colleagues, and being well-organised.
- get and maintain confidence, even in the face of failure.
- stay motivated and goal-focussed, even in the face of difficulties.
- have support to deal with any personal issues in and outside work.
- have time to study, do clinical work, rest, and have a life outside work.

4) What strategies do trainees use to successfully negotiate these key challenges?

To successfully negotiate key challenge, trainees:

- chose jobs and specialties that provided good opportunities and in which they thought they would feel valued.
- asked seniors for advice and additional support, and to sign off their competencies.
- kept good relationships with seniors, which could include not mentioning or complaining about problems.
- set up or made the most of opportunities to share resources and information, and give and receive emotional support from peers at or outside work. IMGs sought out other IMGs.
- worked longer hours to fit revision in with clinical duties or to ensure they signed off their competencies.
- reminded themselves of their goals and values to keep motivated.

5) How, if at all, do cultural and social norms, attitudes and behaviours impact on attainment and progression?

Trainees who **struggled linguistically and to adapt to a UK culture** could struggle in exams and recruitment. UKGs thought IMGs could struggle with patient care although IMGs recognised this less.

Cultural differences could negatively affect trust and relationships with seniors and peers, meaning IMGs sought out other IMGs, which UKGs felt could disadvantage them.

BME UKGs could find it harder to “fit in” with seniors and face **discrimination in recruitment** if not of high **social class** and **exceptionally high-achieving**.

The culture of failure being dependent on internal rather than environmental factors could prevent trainees accessing help, especially those who already felt stigmatised.

6) Are the education and training pathways perceived as fair for all?

Most trainees felt that IMGs and BME UKGs could experience **unconscious bias** in training, recruitment, assessment, and exams. A few had experienced or witnessed incidents of **prejudice and/or favouritism**. Hospital specialties were perceived as **inflexible and un-family-friendly**, and Surgery as having trainers who could be sexist.

A few UKGs and IMGs said that while IMGs could struggle because of cultural differences, this didn't necessarily mean training was unfair as **UK standards needed to be maintained**. White UKG trainers were most likely to think training was fair.

7) What changes, if any, could be made to education and training pathways to ensure these are fair for all trainees?

We asked trainees and trainers how differential attainment could be minimised. These were their suggestions.

Differential attainment by ethnicity in UKGs:

- Trainees and trainers often **didn't know what was causing it and thought more research was needed**. **Raising the profile of the problem** was important.
- **Increasing diversity** in the decision-makers and increasing transparency and objectivity in recruitment would lessen unconscious bias. There was **scepticism about the effectiveness of unconscious bias training** which many said was in place.
- **Positive discrimination was problematic**, even though it might increase diversity.

Differential attainment by PMQ:

- Most trainees thought **more training opportunities, inductions, and mentoring from IMGs and UKGs** would help. There was also an emphasis on **IMG trainees taking responsibility**.
- **Shadowing or schemes to provide additional time and experience** were felt to be potentially useful and some IMGs had arranged it themselves by doing locum jobs.
- Trainers were concerned about **funding for schemes**.
- Increasing diversity at all levels, including patients in exams, could reduce unconscious bias.
- One trainer mentioned the need for an **additional test as well as PLAB**, another said the UK should **lift visa restrictions** to encourage the best IMGs, and another would appreciate more information about medical training in other countries.

It was also clear the following could be helpful:

- **Training understanding and empathy about the additional challenges IMGs face**.
- More opportunities and/or incentives for trainers to **support trainees in taking responsibility** for patients.
- **Increased recognition of the value of the trainee-trainer relationships** to learning.

- **More role models and opportunities for IMGs and UKG peers to trust and learn from one another.**
- **More flexibility, choice in jobs and recognition of the importance of work-life balance** so trainees aren't forced to choose between family and their career.

8) Are trainees and trainers aware of gaps in attainment between different groups of trainees? If so, what do they believe causes this?

Differential attainment by PMQ was recognised much more than differential attainment by ethnicity among UKGs, particularly among trainees. Of the trainees who did recognise it, twice as many were BME UKGs.

Causes of differential attainment by PMQ were ascribed to **lack of knowledge about UK medical systems; lack of cultural capital** which affected ability to **form relationships with colleagues and patients; poorer/inappropriate undergraduate training; linguistic difficulties; lack of peer resources; bias in recruitment and assessment.**

Many felt that BME UKGs should have equivalent knowledge and skills to white UKGs and attributed differential attainment to **unconscious bias in assessments, recruitment, and work**, including **lack of belonging** especially for doctors of **lower social class; lack of confidence**; and **lack of cultural capital** among foreign national and first generation UKGs.

3.5 Principles upon which interventions to increase resilience could be designed

This section draws out some principles underlying the protective processes identified in this report, together with illustrative quotes from participants - the aim being to provide a theoretical basis upon which interventions to increase trainee resilience could be designed and evaluated. It is important to note that additional interventions, such as increasing the diversity of decision-makers, may also be needed to reduce bias or prejudice BME UKGs and IMGs might face in the workplace, assessments, and recruitment.

3.5.1 *Positive trainee-trainer relationships*

- a) Trainers having time to get to know trainees can increase trust, understanding, and confidence, especially for IMGs where cultural differences might impede relationships forming quickly.

I've been fortunate enough as a third year medical student-my third consultant now whom I knew then 11 years ago told me if you want to do Surgery you have to start publishing now, which I did then. And he's pretty much supported me throughout the last 10 years and given me pointers in what to do. So I think I've been fortunate to have that.

Asian Chinese UKG Male ST4+ Surgery

I've quite enjoyed my time in [town], it's fantastic training. It's a small rotation. So we get to know our trainers very well quite quickly on. They know about us, we know about them and it's good interaction, and that has been the highlight of my training in the UK.

Asian Other IMG Male ST4+ Surgery

With that full 12 months I've definitely felt that then you get to know the trainer a lot better. The trainer when they know you better and they have a vested interest in you and they know that you're going to stay as part of that specialty they take more interest and take more time. I can definitely say I've only been in [medical specialty] for the last three months but my trainer has been absolutely, you know, she's so supportive, very fun, just fantastic and very encouraging. And a lot of that is due to the fact that I'm there for so long because so she wants to take an interest in me, whereas [...] everything else has been four month rotations so sometimes you don't even get to know your supervisor at all more often than not. And then how can they deliver very good personalised teaching? Well they definitely didn't give one-to-one teaching, they do group teaching and then that's not as, you know... I'm naturally quite a relatively quiet person compared to some of the other trainees so I wouldn't necessarily ask questions on my own whereas I can do that in my one-to-one tutorials with my trainers.

Asian Other UKG Female ST1-3 Medicine

I got my medical degree from Bangladesh and then I came to this country to do my Master's. I finished that then we had to go through the PLAB system. So I had to pass the PLAB exam and after that I did a clinical attachment. It is an unpaid clinical attachment, I did it in [Town]. [...] And literally after I passed my PLAB I got the GMC accreditation and I applied to the same hospital and my consultants were really happy so they gave me the job. Initially it was a little bit difficult for me, because it was a new system, everything is new, so luckily I got a couple of registrars there who were really helpful. [...] The department was really supportive - the consultants, the registrars and the colleagues, they're really supportive. Because they knew that I'm a new person, though I have some experience before when I did my attachment, but when you are at a real scenario, real job then you have more responsibility, more things, so. But they are supportive, and I actually overcome all these things. But initially I did the attachment, so it helped me a lot to learn a few things. Especially with the system, specially how to use the [system].

Asian Bangladeshi IMG Male ST1-3 GP

I've had one trainee who I did feel lacked confidence when he first came to work with us on the Short Stay Unit. And I felt because he was with us for a year, the amount of time we had to train him was really valuable, and he learned a lot and he progressed a lot and his confidence grew. Because I was his supervisor, we had the continuity and he had a lot of positive feedback which built his confidence up, and then he passed his exams, and then he became a registrar and has gone into the speciality that he wanted to do. And he was an overseas trainee and he just needed a bit of luck, I think, and he was in the right place and that really helped him. [...] [That experience] made me a bit more aware of how important my role is.

Trainer White UKG Female Medicine

- b) Providing trainees with opportunities to take responsibility for patient care when they feel ready, can build trainee confidence and skills; however it is crucial to carefully

evaluate what responsibilities trainees are ready to take on, and to support trainees before and after they take responsibility, because making trainees take responsibility before they are ready and not supporting them in the decisions they take can have very negative effects.

I had a good experience in [...] my previous job where my consultant specifically wanted me to take a leadership and management roles and which didn't happen in previous jobs. So he kind of split up the ward into different parts and I was the only responsible-of course with supervision- but mainly responsible for a part of the ward. And I would run ward rounds and everything independently, with him present, but still that would be my part of the job as if I was acting as consultant. And I think it was particularly interesting for the first time to see how to organise everything from scratch from the point of view of a more senior-than-trainee level. And it was a good experience because [...] there was not a judgmental or negative attitude but it was a lot of, probably, er, comments and suggestions and on a regular basis as well. It was of course, yeah, it would be a continued support.

White IMG Female ST4+ Psychiatry

At the beginning of my GP placement my trainers took quite a lot of time out to give me time to sit and just observe them in clinic first and discuss different cases and observe me consulting patients. And now I see patients independently but then always discuss the case with them afterwards.[...] They've gone kind of above and beyond supporting me in that environment and for such a short space of time I feel a lot more able now to discuss people's feelings, and feel a lot more confident in not just giving a diagnosis but actually giving people tools and practical things to do that make them feel better in themselves even if that's not a medical thing.

Arab UKG Female Foundation

When I was in theatre as an F1 and I was assisting the obstetric registrar and he was teaching me how to sew, I learned a lot. [...] He gave me the confidence to sew the patient. This was during a caesarean section. I had seen many done before, and he had asked me if I had. And I had assisted him before as well and he had shown me how to do it without me doing it on the patient, and this particular time he showed me how he wanted me to stitch and then he gave me the needle and watched me stitch in the way he had shown me. Yeah and he was very encouraging, very patient. [...] It gave me confidence to know that I am able to do these skills. [...] It made me feel like a colleague. He made me feel like I was on the same level even though I knew he was my senior. He made me feel like I was a part of the team and I had a significant role. [...] I wasn't there just to assist. I was there to assist him and learn from what he was doing so that one day I would be able to do the same as him. And it actually at one point during the time where we were sewing this patient up, he became my assistant and I was sewing, and that was nice because I knew that he was there and he was watching and if at any point he needed to step in he would step in. And that made me feel like a doctor in training as opposed to a junior doctor that's just doing service provision.

Black UKG Female Foundation

The first time I had to tell relatives that a patient of theirs was dying. That was quite tough. That was on that geriatrics job with that very supportive consultant. It just so happened that there wasn't anyone around to discuss this with the family and so it needed doing. I didn't feel totally unprepared for it but obviously you-I felt quite nervous about doing it because it's the first time I'd done anything like that. It went very well fortunately. But yeah, certainly I was feeling quite anxious beforehand. [...]

Afterwards my consultant was very keen to discuss that with me um, and he was really supportive. And actually, following that help, he got me doing a lot more of those conversations, which was ideal, you know, getting used to those kind of difficult communication circumstances. Which is help to psychiatry of course.

Mixed UKG Male ST1-3 Psychiatry

- c) Trainers providing positive feedback to trainees, for example telling or showing trainees when they have faith in their abilities, can help trainees relax and concentrate on learning. Positive feedback can also counteract previous negative experiences.

Coming straight into the UK and into this particular hospital - from day 1 it was criticism. I had a college tutor walk up to me once and told me "Anaesthetics is not for everybody, you can get a job as a resident medical officer". So that stayed at the back of my mind for quite another 5, 6 months while I was there. It was getting unhealthy for me, I was getting a lot of psychological emotional stress, so I decided before I leave anaesthetics let me see if other hospitals are like that. [...]

And within the first month of me working [at another hospital] [...] the college tutor there, called me and said "you seem to be not confident about anything, and we've had someone assess you, she thinks your skills are good [...] just relax and pay attention to the work". [laughs] [...] I decided to stay on with that encouragement, with a little bit of effort, and I went on to finish my final anaesthesia fellowship.

Black IMG Male ST1-3 GP

My trainers, the ones I was working with, they said "you deserve to be on the training programme". I know they wrote letters to the head of training, they would support me, they would support me with interview training practice for the interview, viva ... not the viva, but the interview for the job. So obviously helped me build up my CV as well.

Asian Other IMG Male ST4+ Surgery

One particular consultant who was very good and said - actually I think this was probably the second time I'd failed - and she wrote a letter to the College saying [...] "I'm happy with her clinically so this is not a reflection of her clinical abilities."

Black UKG Female ST4+ Medicine

- d) Trainers helping trainees overcome exam anxiety - including anxiety about discrimination – can increase confidence and performance.

I had a trainee who I was supervising who had failed his exams several times over and he'd come to our practice for an extension. He arrived - this was his CSA exam so it was all about his communication, clinical skills. He arrived very anxious, wasn't sure why he kept failing and we sat down and went through his results and we looked at some of his videos and talked and it became quite clear that he'd tried to develop a script which he was trying to apply to every consultation and fit everything the patient was saying into this script and it was all going horribly wrong. He managed to relax into our practice. The team took quite good care of him to try and give him a supportive environment and he settled down and we could then start to look at how that was happening and how to actually relax him and listen to the patients again and follow what they were saying and not what he thought they should be saying. He retook his exam and passed it well the next time and from thereon really took off with his GP skills and learned to trust his own judgement, learned to listen to patients, learned to be much more flexible, really learned how to be a GP. It was a joy to watch him

Trainer White British UKG Female General Practice

I've had an Iraqi trainee who heard on the grapevine 'Oh it's biased against people from abroad and if English is not your first language'. I kept on stressing to her that it's testing your consulting, doing a consultation in Britain, hitting those standards. So you just have to hit those standards. It's not asking what colour or what language you speak or whatever. You've just got to hit those standards. She was worried about it all the way because she'd heard all these things. But actually she passed and she was fine. But it was just getting over that mentality.

Trainer White British UKG Male General Practice

- e) Trainers providing tailored advice about CVs and job applications or who explained UK cultural norms, especially for IMGs.

The turning point was in CT2 and [region]. I had a very, very enthusiastic and excellent registrar. I had the freedom of talking to him about my ambitions to become consultant [specialist surgeon]. He used to spend quite a lot of time going through my CV: Were there other things I needed to mention? Were there other things that I needed to talk about more? When it comes to clinics or theatres he pushes me by saying, he goes and speaks to the consultant and asks the consultant for permission for me to join.

Arab IMG Male ST4+ Surgery

Of course if you are bright you just ask other people and you try and gather from other people, but it's not the same thing as having somebody doing that as a job and having a look at your CV and saying 'Okay what you need to get here, you need this, this And this. You need to get involved in all this, do this, you do a bit of teaching experience'. These things that get you quickly to a kind of standard, to reach the right steps in your CV.

Asian Indian IMG Male Radiology Post-CCT

[Going through the recruitment process] felt like being favoured or [rather] unfavoured because I was an international medical graduate. [My trainers] all understood that and they supported in any other way they could by building up my CV, which is what helped, and I think they've been fantastic, otherwise I wouldn't be here.

Asian Other IMG Male ST4+ Surgery

I had a gentleman who obviously wanted some accommodation from [the local] council [...]. I thought he was just taking advantage of the system and so I was not really going to write the letter to council and he got really angry and abusive. [...] [My trainer and I] we had a chat, she said "Listen, just write the letter with the information we've got on the system, so it's not for us to judge". So she wrote clearly what his condition and what he's told us so, which is now up to the council to make that decision. [...] Now when a patient comes for sick notes and stuff like that then I just have to be-my letters will be explain from my own points. I don't kind of judge, I don't want to offend. I just explain. [...] Thinking back to where I trained then it's a different thing.

Black IMG Male ST1-3 GP

- f) Role models who are aspirational, had succeeded, and can give advice can be valuable motivators, as well as providing practical help. Often these are trainers or seniors at work, but one IMG described meeting role models at a conference organised by the GMC.

One of my key things that sold [surgical specialty] to me was when I was an SHO and I had a really good boss. He was one of these people that you want to be like because he was very approachable, taught me all the time. We had really good ward rounds, he encouraged me to go to clinic, he would make sure I go to theatre, that sort of thing. When I got to theatre he would make sure that I did bits of stuff. When there were trauma weeks he'd make sure I'd do the trauma and that sort of thing. [...] Having good bosses makes a massive difference. I think it makes a massive difference to not just your training but also choosing what you want to do.

Asian UKG Male ST4+ Surgery

In 2005 there was a GMC supported event for overseas doctors. Fantastic event. [...] I was going through a lot of stress at the time. [...] It was a very good eye opener because I had lost hope that I'm not going to get anywhere. [...] I met people who have similar [backgrounds]. They said what you need to do to get around these things and get on with life. Me, if I talk to somebody who comes from India [...] he'll trust me more than anybody else just because I can tell him how the system is, "If you're honest, work hard, do all the things [you'll be ok]". That's [what] people told me on that day. They were mentors, directors from overseas [...] some were even thinking of applying for chief executive posts and they were saying "We are here. We are thinking of becoming chief executives. That's our aspiration".

Asian Indian IMG Male Radiology Post-CCT

It's not just women, but it's often more so relevant to women. I think visibility of role models, good mentors can be very helpful for just as a sounding board to keep things in perspective to see if there's a light at the end of the tunnel, to see how other people have done it before and to kind of believe that it might be possible I think are the biggest thing.

Trainer Black UKG Female Medicine

3.5.2 *Positive relations with peers at work*

- a) Good relationships between trainees, perhaps especially those from different cultural groups, can help trainees realise problems are not due to their own failings or even to discrimination, and provides trainees with emotional and practical support.

I'm [African nationality] and there was an Egyptian who is a consultant there, then another British person who is a consultant anaesthetist now. And when we met outside of there the first thing we all talked about was the experience of working there in the hospital and how horrible it was. [laughs] It wasn't just me, I just come across people of different nationalities, even someone who's native.

Black IMG Male ST1-3 GP

We [other GP trainees] are all in the same situation. Often someone has gone through something that you're going to go through, and they will be able to support you or know someone who will be able to help you out. I think that's really important for us.

Asian Indian UKG Female ST1-3 GP

- b) IMGs can value meeting other IMGs who they feel understand and will not judge them, and may want to provide this support for juniors.

I had two colleagues who were actually very helpful because they are like me, they are international medical graduates, so they have already overcome all the challenges. So they are sympathetic to me. [...] I've been mentors to other people coming into the system, I just laugh about it 'Don't worry, you will feel this way, just expect it this way'.

Asian Bangladeshi IMG Male ST1-3 GP

For the last 1 ½ years or 2 years just out of my own initiative, international medical graduates when they come to [town] I've approached them, I've talked to them. Just yesterday I was talking to one of the CT1s. Just because I saw that he had potential in terms of being able to pass this exam, so I just wanted to, at a CT1 level I just wanted to improve some of the things. He's from Nigeria, he speaks reasonably well, but was talking to him about how he could communicate more effectively. Because I have to go through this process myself, there wasn't anyone who taught me this.

[...] I know that some of the things which I have learnt myself, I can probably pass on to international medical graduates. I've been doing it on an informal kind of basis which is much more helpful than making it a little bit more formal. I catch them in doctors mess and sometimes just bombard them with information, just get hold of them 'Look you need to learn this' in a kind of friendly and informal way. I don't know whether- there is no evidence that I have that it will make difference, but it's worth trying.

Asian Pakistani IMG Male ST4+ Psychiatry

- c) Good peer relations can be facilitated by deaneries, Trusts, GP practices, and other institutions.

There was a good thing in my foundation training, they arranged a meeting for overseas doctors and then they discussed the problems they are going through, and then how they can tackle that. So I think it was good, but still it did not cover the whole but at least they tried, they tried to bring all of the overseas doctors together to share their experience of work and then how they can help each other, so it was good.

Asian Pakistani IMG Female ST4 Psychiatry

We have to attend our [teaching sessions] and if we don't then we get hauled up at the ARCP so it's compulsory. That does two things; it means that everyone gets together at least once a week so it's as much a social event as a training event. Also the TPD [training programme director] and at the academic TPD try and come along.

Arab UKG Male ST4+ Surgery

In the induction period they got trainees who've just passed their exams to come and discuss their experience of core training and MRCPsych exams.

Mixed UKG Male ST1-3 Psychiatry

The exams slowly change and develop and often some of us who are examiners say it's somewhat difficult for the consultant trainers to prepare them for the multiple-choice exams and so getting trainees who have just gone through it and been successful to give advice and tips, and technique tips and revision tips is often the best way to do that sort of training

Trainer White British UKG Male Radiology

3.5.3 *Work-life balance and support outside work*

- a) Support from family and friends outside work can help trainees with difficulties at work including bullying and exam failure, as well as with problems outside of work that they may not want to speak to someone at work about.

I walk in the door and get a cuddle and a smile from my son [...] that would make the rest of life worth living and the fact that you perhaps were having difficult trainers a lot more manageable because you could accept that your job was being made miserable because of the rest of life outside work was happy.

Asian Other UKG Male ST4+ Surgery

I would personally put my family in number one. Because all along they have been very supportive of my learning throughout, supporting in, like, clinical way as well. Of course practically like childcare, going, coming, on calls, rotas etc, but emotionally as well they have been there all the time. Although they might not, because there are boundaries of confidentiality I don't discuss my things with them, but they just are there and I know that I have got somebody to fall back on, so that's, I would put them at number one.

Asian Indian IMG Female ST4+ Psychiatry

Having non-medic friends who show you that life isn't all about your job. When you're in this weird, weird microcosm that is medicine, it's so difficult to step away from it.

Asian Pakistani UKG Male ST1-3 GP

With the personal issues with my family I would definitely not really want any kind of help from anyone at work. I personally would want to keep that separate and actually I've had fantastic support from my sister and my husband.

Asian Other UKG Female ST1-3 Medicine

- b) Enabling trainees to have a work-life balance is important for good learning at work because it means trainees don't have to choose between their family and their career, and because it enables trainees to get support outside work. Increasing work-life balance could include changing working hours, being more supportive of flexible working, and organising training and selection into training in a way that enables trainees to have autonomy over their geographic location and important life choices such as buying a house or having children. Only one trainee described having support to work part-time, and many felt the lack of autonomy and work-life balance in medicine was a serious barrier to their learning, as explained in the main Results section, above.

I've worked less-than-full-time for four years, and I just work less-than-full-time in a full time post. It's fine. The service has to adapt to it, sure but only a little bit.

White British UKG Female ST4+ Psychiatry

3.5.4 *Support from organisations and their representatives*

- a) Organisations and their representatives can help with a variety of professional and personal problems, including bullying and suspected racism.

I have a good support from the Deanery who gave me the clinical academic [post?]. I feel an immense sense of responsibility towards that to deliver. I had support from my TPD, two of them in particular for my personal issues with the pregnancy which kind of threw a spanner in the works just in the blink of an eye, as they do. So yes I've had an immense amount of support for which I'm extremely grateful. I hope they would likewise consider that their investment is worth it. And I have a huge amount of support at home.

Asian UKG Female ST4+ Surgery

I did two GP registrar posts and the first one there was a lot of bullying and again they had to change the post afterwards.

Mixed UKG Male ST1-3 Psychiatry. Failed to progress in another specialty.

There was a big misunderstanding between myself and the colleague, who was actually the ward manager [...] I did get support from my supervisor and, I wouldn't say in the end me and this colleague completely made up and everything was hunky dory but at least things were left at a level where in terms of working together we did that as best as we could.

Black IMG Male ST4+ Psychiatry

- b) A handful of trainees mentioned using online resources to help pass examinations.

Watching videos by some consultants who did a video and explained [the doctor patient] relationship in the video, and for me that made a huge, huge difference [to passing exams].

Black IMG Female ST4+ Psychiatry

There's plenty of support in terms of the going through the examinations and stuff, all the doctors, consultants and all the registrars, they've all been through it and there's quite a lot of support there. There's a lot of support online, to help you there's lots of courses and stuff, so there's plenty of support from that point of view. In terms of the visa process, I don't know particularly, that's all I can say. I don't know what sort of support I have to look to, to talk to about what's going to happen with the visa and how that will affect my application.

Asian UKG Male Foundation

3.5.5 Increasing or rekindling trainee motivation

In addition to the motivation arising from positive relationships, the following could increase or rekindle trainees' motivation at work.

- a) Trainees keeping in mind their love of medicine and their goals can help keep them motivated and fight for what they needed to progress.

The only thing that I love about medicine is that you get to help people, you have a positive impact every day of your life and it's direct, you know, you do an operation, someone comes out hopefully better. [...] The consequence of that is massive sacrifice for the entirety of my life.

Asian Pakistani UKG Female ST4+ Surgery

My profession is like a passion for me and I'd say I enjoy this profession, the interaction with people, with clients, with everything that's surrounding me. So for me it's not a hardship, it was a blessing I would say. [...] I enjoy working and still I enjoy benefiting for me this is really rewarding seeing that my contribution made a difference and that is something that keeps me going and gives me the motivation and contribution to the best team in particular and to the larger society in general.

Asian Other IMG Male ST4+ Psychiatry

I'm particularly happy at the moment with my training.

Interviewer: And is there anything about that that's helped you?

So, well probably the organisation of the hospital, of the department itself. The consultants are very approachable and they do loads of formal and informal teachings. I have loads of reporting sessions which at my stage are important because it's a period in which you need a lot of time to dedicate on that, which is not present in every hospital. And the main thing, the thing that I like most, is that I've got the possibility of having one or two sessions a week in what I'm interested in [...] because others are very motivated to teach me.

White IMG Female ST1-3 Radiology

I love cardiology [...] I chose England for a particular reason. So I came with that goal in mind. One of the challenges that I faced initially was one can easily get lost in the system because there are no clear roles. Some Trusts are trying at the moment, but I think if we can do more for IMGs you know to have a clear-cut role in terms of assessment. [...] If you are not getting assessment you are going nowhere. [...] I said 'I want to have an educational supervisor' [...] because I realised that without all those [supports] you cannot move forward.

Black IMG Male ST1-3 Medicine

- b) Framing challenges as opportunities such as exam failure as an opportunity to learn can keep trainees motivated.

I think sometimes failures are good learning. Stressful for the short term, in the long term it's a lifetime learning.

Asian Indian IMG Male Radiology Post-CCT

It encouraged me, made me-I guess because you fear failing but then once I failed then "Oh, I'm still alive". So just if anything it made me stronger. I don't want to fail again.

Black UKG Female Foundation

I'm glad in a way that I did the [practical] exam a few times because I think it wasn't a test-it wasn't teaching me about knowledge. It was teaching me about character. And so I think certainly my registrar years particularly, when people are getting stressed about patients that are unwell I find that actually I think a lot of the feedback will go that I was incredibly calm. Where I don't think that would be the case when I was an SHO. I think that's something which I think I learned from that experience of the exam.

Black UKG Female ST4+ Medicine

4 Conclusions

137 doctors, 96 trainees and 41 trainers, took part in focus groups and interviews about their experiences and their perceptions of the fairness of postgraduate training. Most trainees had found some aspects of postgraduate training stressful and difficult that posed risks to successful outcomes. These included dysfunctional and highly-pressurised environments, bullying, lack of autonomy, lack of work-life balance, and lack of confidence.

BME UKGs and IMGs were perceived to face additional risks including difficulties fitting in, unconscious bias in assessments, recruitment, and day-to-day working, and occasionally overt prejudice; greater chances of social isolation. IMGs also could lack knowledge and experience of UK cultural norms, working in the NHS, and assessment formats; and could have linguistic problems, difficulties getting jobs because of visa or workforce planning restrictions, and difficulties forming relationships because of cultural differences. This could be a vicious circle: more risks could reduce confidence and motivation, which could make them less enjoyable to teach, making them receive poorer quality teaching, reducing still further their confidence and motivation.

Protective processes included: trainers providing specific clinical learning opportunities, advising on CV-building, taking time to get to know and build trust with trainees, providing pastoral support, showing belief in trainees, and addressing exam anxiety; peers providing practical and emotional support; being able to access support from family and friends outside of medicine; having relevant role models; and having pastoral and educational support from institutions.

Trainees and trainers also suggested increasing the diversity of doctors to reduce unconscious bias, providing additional opportunities for IMGs to learn the culture of medicine in the UK including having good relationships with colleagues, and mentoring from peers and seniors. They also said that more research is needed to truly understand the causes of differential attainment and greater acknowledgement of the problem. It could also be beneficial to highlight research that has shown unconscious bias is not a major cause of differential attainment in some clinical exams.

Risks, and vulnerability and protective processes are interrelated in complex ways, and it is likely that changes in one area will lead to changes in another. It is therefore advantageous to focus on those that affect the most trainees, are most amenable to change, and which will have the largest impact (63).

Standalone Summary

Background, Aims and Objectives

This project was part of a programme of research commissioned by the General Medical Council (GMC) to explore why UK doctors from Black and Minority Ethnic (BME) groups, and doctors whose Primary Medical Qualification (PMQ) is from a medical school outside of the UK have, on average, poorer outcomes in assessments and recruitment compared to white doctors and UK medical school graduates (1).

Differential attainment is found internationally, at undergraduate level, and outside medicine. Its causes are poorly understood, but a 2015 Higher Education Funding Council for England report (2) identified four categories of causal factors operating at a national policy (macro) level, an institutional (meso) level, and at an interpersonal (micro) level to impede BME UK students' performance. We used this framework to identify causes of differential attainment in doctors and used psychological theories of risk and resilience to understand how and why some doctors from groups with poorer average performance nonetheless do well.

The project aimed to identify facilitators, and barriers to progression that differentially impact on doctors depending on where a trainee obtained their PMQ and/or their ethnicity.

Main objectives were to:

- 1) Explore the experience of undertaking postgraduate medical training from the point of view of trainees and trainers.
- 2) Understand the nature and causes of differential attainment.
- 3) Identify possible actions to change education and training pathways to make them fairer and reduce differences in outcomes.

Methods

We used qualitative semi-structured focus groups and one-to-one telephone interviews to explore the experiences of training from trainee and trainers' points of view. We purposively sampled from four locations in England and Wales with differing proportions of UK graduates (UKGs) and International Medical Graduates (IMGs) and differing average postgraduate examination performance; from white and BME groups; from UKG and IMG groups; from all stages of training; and from six specialties with differing competition ratios and proportions of IMGs, plus Foundation training. Trainer interviews triangulated trainee findings.

We looked for evidence that differential attainment was caused by factors in four categories: Curricula, teaching, learning and assessment; Trainee relationships at work; Psychosocial and identity factors; and Capital. Within these we looked for risk factors and vulnerability processes that translated risks into poorer outcomes for BME UKGs and IMGs, and protective processes that helped trainees achieve good outcomes.

Results

96 trainees and 41 trainers took part in 16 focus groups and 49 interviews in November and December 2015.

Risks to BME UKGs and IMGs

Postgraduate medical training posed risks to trainees from all ethnic/PMQ groups, but BME UKGs and IMGs faced numerous additional risks and vulnerability processes, which were interrelated and overlapped the four categories:

- 1) Poorer relationships with seniors and problems fitting in at work can lead to fewer learning opportunities, loss of confidence, and increased chance of mental health problems.
- 2) Perception that unconscious bias in recruitment, ARCPs, and at work can lead to poorer outcomes, as can anxiety about the possibility of bias. Also the case for women in Surgery.

You are 35, you are from India, and he's 25, he's British medical graduate, he just passed the exam. And though your [recruitment] score is the same, who will get the job? [...] This is the reality, it's happening everywhere.

Asian Bangladeshi IMG Male ST1-3 GP

I hear [consultants] who come out with remarks that amount to- and I think I'm pretty much quoting verbatim, "I would never hire a female registrar if I could help it".

Asian UKG Female ST4+ Surgery

- 3) Poorer exam and recruitment performance can lower confidence, and exam resits can interfere with workplace learning. Poorer performance can also lead to less autonomy in job choice and increased likelihood of being separated from family and support networks, with an associated increased chance of mental health problems:

M1: The year apart. We've tried a year so I deferred for a year but still couldn't start and all my wife and kids couldn't move up. We spent a year commuting from Sheffield to Bristol. [...]

M2: You can't give up a [training] number, that's just a golden ticket. It's really career or family sometimes. It's tough.

M1: Arab UKG Male ST4+ Surgery

M2: White IMG Male ST4+ Surgery

- 4) Fear of being labelled as problematic can impede trainees reporting problems, including perceived racism, and there was a potential lack of recognition from trainers about the effects of environmental stressors, especially because within medicine there is a cultural belief that failure results from a lack of motivation or ability.

Additional risks and vulnerability processes for IMGs:

- 1) Inexperience with UK assessments and UK cultural norms especially communication skills, unfamiliarity with recruitment processes and NHS/work systems and processes.
- 2) Poorer relationships with colleagues and potentially with patients because of linguistic issues and cultural differences. Potentially exacerbated when trainers lack confidence in IMGs' prior training and IMGs perceive UKGs don't understand them.

When you are qualified from outside, there are too many differences. [...] People who will be able to support you [are] mainly people who went through the same process, rather than people who qualified from the UK. They had all their training in the UK so they don't know what actually problems you face when it comes to the consultants who came from abroad and they studied the same process as you did, they know what problems you are facing and they try to support you with this more.

Asian IMG Female ST1-3 Medicine

I just feel a little bit unnerved when somebody hasn't trained here.

Trainer White UKG Female Medicine

- 3) Concern from IMGs that cultural norms can take a long time to learn. Concern from some trainers that IMGs' cultural differences were too ingrained to be changed.
- 4) Potential stigma about supplementary help.
- 5) Anxiety about the prospect of discrimination in clinical exams and the knowledge that, statistically, IMGs are more likely to fail.
- 6) Visa difficulties and costs and ineligibility for jobs can reduce training opportunities.

Protective processes for BME UKGs and IMGs:

These came mainly in the form of positive relationships, as well as personal outlooks:

- 1) Trainers having the time and inclination to get to know their trainees increases trust, understanding, and confidence, especially for IMGs where cultural differences might impede relationships forming quickly. Trainers telling trainees that they had faith in their abilities helped them relax and concentrate on learning. Trainers helping trainees overcome exam anxiety - including anxiety about potential bias - increased trainee confidence and performance, as did trainers providing advice about CVs and job applications and who explained UK cultural norms for IMGs. The same trainee could be transformed by belief from a trainer:

Coming straight into the UK and into this particular hospital - from day 1 it was criticism. I had a college tutor walk up to me once and told me "Anaesthetics is not for everybody, you can get a job as a resident medical officer". So that stayed at the back of my mind for quite another 5, 6 months while I was there. It was getting unhealthy for me, I was getting a lot of psychological emotional stress, so I decided before I leave anaesthetics let me see if other hospitals are like that. [...] And within the first month of me working [at another hospital] [...] the college tutor there, called me and said "you seem to be not confident about anything, and we've had someone assess you, she thinks your skills are good [...] just relax and pay attention to the work". [laughs] [...] I decided to stay on with that encouragement, with a little bit of effort, and I went on to finish my final anaesthesia fellowship.

Black IMG Male ST1-3 GP

- 2) Emotional support from family and friends outside work helped trainees who having difficulties at work including with bullying and exam failure:

I walk in the door and get a cuddle and a smile from my son [...] that would make the rest of life worth living and the fact that you perhaps were having difficult trainers a lot more manageable because you could accept that your job was being made miserable because of the rest of life outside work was happy.

Asian Other UKG Male ST4+ Surgery

- 3) IMGs valued knowing other IMGs who they felt understood them and would not judge them and BME UKGs, IMGs, and women valued role models who were aspirational, had succeeded, and could advise them. However good relationships between trainees from different cultural groups could help trainees feel less alone and at fault:

I'm [African nationality] and there was an Egyptian who is a consultant there, then another British person who is a consultant anaesthetist now. And when we met outside of there the first thing we all talked about was the experience of working there in the hospital and how horrible it was. [laughs] It wasn't just me, I just come across people of different nationalities, even someone who's native.

Black IMG Male ST1-3 GP

- 4) Deaneries, clinical supervisors and educational supervisors helping trainees deal with bullying racism, health and other personal problems, and being supportive of flexible working practices to increase work-life balance.
- 5) Keeping in mind their love of medicine and their goals, and framing challenges as opportunities (e.g. exam failure as aiding learning) could help keep trainees motivated and fight for what they needed to progress:

The only thing that I love about medicine is that you get to help people, you have a positive impact every day of your life and it's direct, you know, you do an operation, someone comes out hopefully better. [...] The consequence of that is massive sacrifice for the entirety of my life.

Asian Pakistani UKG Female ST4+ Surgery

Conclusions

Postgraduate medical training can be psychologically risky, and some of these risks seemed to vary between environments and specialties. Trainees from BME UKG and IMG groups could face additional risks and vulnerability processes with the potential to impede their performance, often by affecting personal relationships.

Protective processes that facilitated trust and positive relationships could lead to increased learning opportunities and confidence. Environmental changes may be able to facilitate these relationships.

Risks, and vulnerability and protective processes were interrelated in complex ways - changes in one area will likely lead to changes in another. Interventions should focus on those which affect the most trainees, are most amenable to change, and will have the largest impact.

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Appendix

Interview schedules

One-to-one interviews - trainees:

Thank you for taking part in this research, which aims to explore the experiences of doctors in training, particularly concentrating on the fairness of training in relation to a doctor's ethnicity and the country in which a doctor went to medical school.

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, and we will remove identifiable features to anonymise the interviews. All notes will also be anonymised. The data will be kept confidential and only published in a way that means it cannot be attributed to you as an individual. Is that OK?

In a moment 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.

[If phone interview TURN ON TAPE and ask: can you just confirm your consent to take part for the tape?]

1. Tell me a bit about yourself

i) What's your current job? (*prompt: stage of training, specialty if appropriate, deanery/LETB*)

2. I'm going to ask some questions about the experiences you've had working as a doctor in training in the UK.

i) Think of a time when you felt you really learned a lot. (*if necessary: What happened?*)

What was it about the experience that helped you learn? (*prompt: supervision from senior colleagues, other trainees involved?*)

Did the experience change you in any way? (*prompt: how motivated you felt? the direction of your career?*)

ii) Think of a time when you really didn't learn much at all. (*if necessary: What happened?*)

What was it about the experience that hindered your learning? (*prompt: supervision from senior colleagues, other trainees involved?*)

Did the experience change you in any way? (*prompt: how motivated you felt? the direction of your career?*)

iii) Now I'd like you to think about a time when something happened that was difficult to deal with. (*if necessary: What happened?*)

What was it about the experience that made it so difficult?

Did you get any support to help you deal with it? (*prompt: Did you talk to anyone about it? Who? Can you remember what they said to you about it?*)

Did the experience change you in any way?

3. Sometimes you can get two trainees in what is essentially the same job but one learns a lot and the other learns very little.

Why do you think that might be?

4. Thinking again about your own career working as a doctor in the UK

i) What are the main challenges or hurdles that you have had to deal with professionally to get to where you are today in your career? (*prompt: getting through assessments, getting through selection processes*)

Did you get any help or support? From whom? (*prompt: How about outside of work?*)

Did anyone or anything hinder you? (*prompt: opportunities provided by the workplace; peers, senior colleagues*)

If they mention more than one challenge: Of all the challenges you've talked about, which would you say was the most challenging? If necessary: what made it so challenging?

ii) We are particularly interested in assessments, including ARCPs and Royal College examinations.

What comes into your head when I say "ARCP"?

How fair do you think ARCPs are?

What about Royal College exams? How fair are they?

Have you ever failed an exam or an ARCP? (*prompt: if exam, was it written or clinical*)

Why do you think you failed?

Do you think failing affected you in any way? (*if necessary: How?*)

b) Now let's look to the future

i) Do you have an idea of where you ultimately would like to get to career-wise?

If yes: Where is that?

ii) What are the main challenges or hurdles that you are going to have to deal with professionally in the next few years?

Will you need any help or support to deal with those challenges or hurdles? What kind? From whom? (*Prompt: other trainees, senior colleagues, anyone outside work?*)

How easy or difficult do you think it will be to get the help and support you need?

5. Thinking about trainees in general now

i) Evidence shows that UK-trained doctors from minority ethnic groups (in other words people who would not tick the 'white' box on an ethnic monitoring form) are less likely to be successful in recruitment and in assessments compared to UK-trained doctors who are white.

What do you think about this?

Why do you think this might be the case?

What could be done to reduce this difference?

ii) Evidence also shows that doctors who trained outside of the UK are less likely to be successful in recruitment and in assessments compared to UK-trained doctors.

What do you think about this?

Why do you think this might be the case?

What could be done to reduce this difference?

Focus group - trainees:

Thank you for taking part in this research, which aims to explore the experiences of doctors in training, particularly concentrating on the fairness of training in relation to a doctor's ethnicity and the country in which a doctor went to medical school.

We are going to be audio recording this focus group and my colleague [name] will be taking notes. This is to help us accurately remember what everyone says. The recording will be sent to a professional independent transcriber, and we will remove identifiable features to anonymise the interviews. All notes will also be anonymised. The data will be kept confidential and only published in a way that means it cannot be attributed to you as an individual.

We would also like you to agree to keep everything you your colleagues say in this room confidential. Can we agree that? [make sure everyone agrees].

In a moment I'm going to be asking you a series of questions. There are no right or wrong answers, we just want to hear your opinions. This focus group is not about reaching consensus, we are interested in hearing a variety of different opinions.

1. Tell me a bit about yourself

i) What's your name and your current job? (*prompt: stage of training, specialty if appropriate, deanery/LETB*) [ask everyone in turn]

2. I'm going to ask some questions about the experiences you've had working as a doctor in training in the UK.

i) Think of a time when you felt you really learned a lot. (*if necessary: What happened?*)

What was it about the experience that helped you learn? (*prompt: supervision from senior colleagues, other trainees involved?*)

Did the experience change you in any way? (*prompt: how motivated you felt? the direction of your career?*)

ii) Think of a time when you really didn't learn much at all. (*if necessary: What happened?*)

What was it about the experience that hindered your learning? (*prompt: supervision from senior colleagues, other trainees involved?*)

Did the experience change you in any way? (*prompt: how motivated you felt? the direction of your career?*)

iii) Now I'd like you to think about a time when something happened that was difficult to deal with. (*if necessary: What happened?*)

What was it about the experience that made it so difficult?

Did you get any support to help you deal with it? (*prompt: Did you talk to anyone about it? Who? Can you remember what they said to you about it?*)

Did the experience change you in any way?

3. Sometimes you can get two trainees in what is essentially the same job but one learns a lot and the other learns very little.

Why do you think that might be?

4. Thinking again about your own career working as a doctor in the UK

i) What are the main challenges or hurdles that you have had to deal with professionally to get to where you are today in your career? (*prompt: getting through assessments, getting through selection processes*)

Did you get any help or support? From whom? (*prompt: How about outside of work?*)

Did anyone or anything hinder you? (*prompt: opportunities provided by the workplace; peers, senior colleagues*)

If they mention more than one challenge: Of all the challenges you've talked about, which would you say was the most challenging? (*If necessary: what made it so challenging?*)

ii) We are particularly interested in assessments, including ARCPs and Royal College examinations.

What comes into your head when I say "ARCP"?

How fair do you think ARCPs are?

What about Royal College exams? How fair are they?

Anyone failed an exam or an ARCP? (*prompt: if exam, was it written or clinical*)

Why do you think you failed?

Do you think failing affected you in any way? (*if necessary: How?*)

b) Now let's look to the future

i) Do you have an idea of where you ultimately would like to get to career-wise?

If yes: Where is that?

ii) What are the main challenges or hurdles that you are going to have to deal with professionally in the next few years?

Will you need any help or support to deal with those challenges or hurdles? What kind? From whom? (*Prompt: other trainees, senior colleagues, anyone outside work?*)

How easy or difficult do you think it will be to get the help and support you need?

5. Thinking about trainees in general now

i) Evidence shows that UK-trained doctors from minority ethnic groups (in other words people who would not tick the 'white' box on an ethnic monitoring form) are less likely to be successful in recruitment and in assessments compared to UK-trained doctors who are white.

What do you think about this?

Why do you think this might be the case?

What could be done to reduce this difference?

ii) Evidence also shows that doctors who trained outside of the UK are less likely to be successful in recruitment and in assessments compared to UK-trained doctors.

What do you think about this?

Why do you think this might be the case?

What could be done to reduce this difference?

One-to-one interview – trainer

Thank you for taking part in this research, which aims to explore the experiences of doctors in training, particularly concentrating on the fairness of training in relation to a doctor's ethnicity and the country in which a doctor went to medical school.

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, and we will remove identifiable features to anonymise the interviews. All notes will also be anonymised. The data will be kept confidential and only published in a way that means it cannot be attributed to you as an individual. Is that OK?

In a moment 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.

[If phone interview TURN ON TAPE and ask: can you just confirm your consent to take part for the tape?]

1. Tell me a little bit about yourself

- i) Where did you go to medical school and when did you graduate?
- ii) What's your clinical job (*prompt: specialty, deanery*)?
- iii) What responsibilities do you have as a trainer?

2. I'd like to ask you some questions about your experiences as a trainer

- i) Think of a time at work when you felt your trainees, or one trainee in particular, learned a lot (*if necessary: What happened?*)

Why was it that they learned so much, do you think?

Did that experience change the way you approach your role as a trainer in any way?

- ii) Think of a time at work when you felt your trainees, or one trainee in particular, really didn't learn anything (*if necessary: What happened?*)

Why was it that the learning didn't happen, do you think?

Did that experience change the way you approach your role as a trainer in any way?

- 3. Sometimes you can get two trainees in what is essentially the same job but one learns a lot and the other learns very little.**

Why do you think that might be?

- 4. What are the main challenges or hurdles that trainees have to deal with in their careers?**

Of all those challenges, which would you say was the most difficult? Why?

What help or support do you think trainees need in dealing with those challenges?
(*prompt: How about outside of work?*)

What do you think are the main things that hinder trainees' progression? (*Prompt: opportunities provided by the workplace*)

- 5. We are very interested in assessments, ARCPs and Royal College exams.**

What comes into your head when I say "ARCP"?

How fair do you think ARCPs are?

What about Royal College exams? How fair are they?

6. Thinking about trainees in general now

i) Evidence shows that UK-trained doctors from minority ethnic groups (in other words people who would not tick the 'white' box on an ethnic monitoring form) are less likely to be successful in recruitment and in assessments compared to UK-trained doctors who are white.

What do you think about this?

Why do you think this might be the case?

What could be done to reduce this difference?

ii) Evidence also shows that doctors who trained outside of the UK are less likely to be successful in recruitment and in assessments compared to UK-trained doctors.

What do you think about this?

Why do you think this might be the case?

What could be done to reduce this difference?

7. Anything else you wanted to say, or that you wish I'd asked you about?

Focus group - trainers:

Thank you for taking part in this research, which aims to explore the experiences of doctors in training, particularly concentrating on the fairness of training in relation to a doctor's ethnicity and the country in which a doctor went to medical school.

We are going to be audio recording this focus group and my colleague [name] will be taking notes. This is to help us accurately remember what everyone says. The recording will be sent to a professional independent transcriber, and we will remove identifiable features to anonymise the interviews. All notes will also be anonymised. The data will be kept confidential and only published in a way that means it cannot be attributed to you as an individual.

We would also like you to agree to keep everything you your colleagues say in this room confidential. Can we agree that? [make sure everyone agrees].

In a moment I'm going to be asking you a series of questions. There are no right or wrong answers, we just want to hear your opinions. This focus group is not about reaching consensus, we are interested in hearing a variety of different opinions.

1. Tell me a little bit about yourself

- i) What is your name? Where did you go to medical school and when did you graduate?
- ii) What's your clinical job (*prompt: specialty, deanery*)?
- iii) What responsibilities do you have as a trainer?

2. I'd like to ask you some questions about your experiences as a trainer

- i) Think of a time at work when you felt your trainees, or one trainee in particular, learned a lot (*if necessary: What happened?*)

Why was it that they learned so much, do you think?

Did that experience change the way you approach your role as a trainer in any way?

- ii) Think of a time at work when you felt your trainees, or one trainee in particular, really didn't learn anything (*if necessary: What happened?*)

Why was it that the learning didn't happen, do you think?

Did that experience change the way you approach your role as a trainer in any way?

- 3. Sometimes you can get two trainees in what is essentially the same job but one learns a lot and the other learns very little.**

Why do you think that might be?

- 4. What are the main challenges or hurdles that trainees have to deal with in their careers?**

Of all those challenges, which would you say was the most difficult? Why?

What help or support do you think trainees need in dealing with those challenges? (*prompt: How about outside of work?*)

What do you think are the main things that hinder trainees' progression? (*Prompt: opportunities provided by the workplace*)

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