Exploring dental academics' perceptions of and experience with discrimination in the UK and Ireland: a qualitative study

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Key points

- Many dental academics believe that career discrimination exists on the basis of race, gender and other intersecting characteristics.
- Even subtle differences, omissions or microaggressions can have a significant impact on a career.
- Individual mentorship and support appears to be important in helping dental academics to navigate the complexities of an academic career.

Abstract

Introduction Diversity is known to be important but diversity of dental school academics in the UK and Ireland is low in comparison with the dental profession and the overall population. The aims were to explore whether UK and Ireland dental school academics are satisfied with their career progression, whether they believe that there are barriers to career progression in dental schools based on protected characteristics, and experience of discrimination at work.

Methods An online survey, including four free-text questions related to the study aims, was circulated by the Dental Schools Council to dental academics at all UK and Ireland dental schools. Qualitative content analysis was used to analyse free-text comments.

Results and discussion There were 192 responses from 20 dental schools. Five data categories were constructed which highlight the impact of discrimination in dental academia, the importance of opportunities and support, different perspectives of diversity and discrimination, and academic and institutional culture.

Conclusion Staff perceived and experienced barriers to career progression. Many were satisfied with their career progression, but a proportion of staff expressed dissatisfaction and attributed this to discrimination based upon protected characteristics. The culture in dental schools is beginning to change to address factors contributing to inequality in dental academia.

Introduction

Equality of opportunity in the workplace is important. Diversity brings significant advantages to organisations as thinking and knowledge are expanded through differing perspectives and experiences.[1] Discrimination is also prohibited by the Equality Act 2010.[2] However, medical and dental careers in the UK do not appear to be equitable. In medicine, the majority of consultant posts are filled by white people.[3] Women are consistently less represented in higher clinical academic positions, including dental careers, and they report discrimination in the workplace on a variety of counts.[4,5,6,7] In dental academia, minoritised groups and women are least represented in the most senior positions.[8] Loss of diversity can be seen at key stages of dental training, from undergraduate entry to specialist recruitment.[9,10] The intersection and impact of multiple minoritised characteristics in a single individual (eg a gay Black woman) also need to be considered in dental academia.[11,12]

Perceptions of UK dental school staff about issues of inclusion and diversity have not previously been explored. The aim of this study was to explore whether people in academic positions in UK and Ireland (UK&I) dental schools are satisfied with their own career progression, and their personal or observed experience of discrimination or inequity.

Throughout this article, the term 'racialised minority' is used to refer to people of non-white backgrounds, in recognition of the socially constructed nature of race and to avoid the 'othering' that arises from the use of terms such as BAME (a generic term that refers to Black, Asian and Minority Ethnic).[9]

Methods

Ethical approval was obtained from Newcastle University (5023/2020) for the distribution of an anonymous online survey to staff in all schools in the UK and Republic of Ireland. The survey was distributed by the Dental Schools Council to UK&I dental schools from January to May 2021 (see online Supplementary Information). All participants gave informed consent.

In addition to a quantitative element,[13] four free-text comment questions were included to: 1) establish beliefs about barriers to career progression based upon protected characteristics; 2) enquire about experience

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of discrimination in the workplace; 3) enquire about satisfaction with career progression; and 4) enquire about factors causing inequality for dental school staff. The questions are shown in the online Supplementary Information.

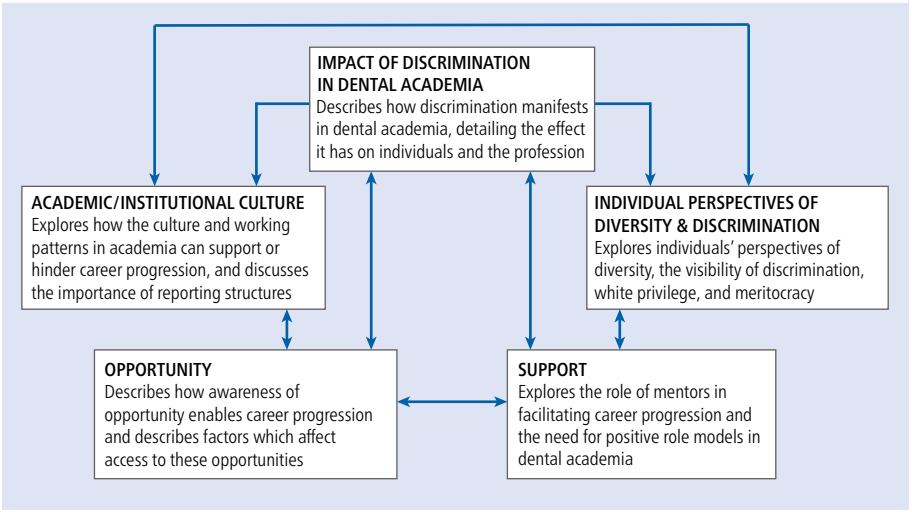
Content analysis was undertaken on survey comments, informed by a critical realist perspective.[14] Analysis was carried out within a shared Microsoft Excel (Microsoft Corporation) document. Multiple researchers (ZF, HF, PW) analysed all survey responses. Each comment was coded, taking an inductive approach. Data were interpreted reflexively by women at different career stages of dental academia, with experience of maternity and caring responsibilities, taking an interpretivist perspective. Data were coded independently and, after discussion, codes with common meanings were organised into categories which were subsequently refined.

Results and discussion

The survey received 192 responses from 20 dental schools. Surveys of UK dentists can yield response rates of 7–27%, so with approximately 607 full-time equivalent academics employed at UK dental schools, we hoped to obtain around 170 responses.[4,8,15] Open questions in surveys tend to get fewer responses than closed questions.[16] Figures from the most recent survey of dental academics[8] indicate that 72% of dental academics are white and 55% are men. This compared to 85% of our sample who were white and 45% who were men. Participants described experiencing barriers to career progression and witnessing or experiencing discrimination because of gender, ethnicity, age, disability, maternity, carer status, socioeconomic status, religion and nationality. Comments described how some of these factors overlapped.

Five categories were developed and the way they interlink is shown in Figure 1.

Fig. 1 Diagram showing the five interlinking categories developed following content analysis of survey data



Impact of discrimination in dental academia

Some respondents had not experienced or witnessed discrimination in their workplace (which may be related to the number of white survey participants); however, many responses reported discrimination related particularly to pay and promotion. Examples were given where people observed and/or experienced less-qualified individuals being offered promotions over those who were felt to be more qualified. Women felt they were not encouraged to apply for promotion or had been told they were 'not good enough to remain in a senior position despite being more qualified than male colleagues' (P187, 35–44).

Comments provided examples of how gender affects career choices and progression:

- 'Gender is a barrier to leadership roles, as many women are not always considered for leadership position based on their child status' (P143, 25–34).

Women reported attempts being made to dissuade them from speciality training:

- 'I was made to reconsider my desired career pathway […] as I hadn't yet had children but wanted to in the next few years' (P167, 25–34).

Some specialties will have been, therefore, denied the skills of talented women, and young clinicians will have been denied the opportunity of having female senior clinical role models. This maternal wall bias has been reported elsewhere in clinical academia.[7] However, women in positions of power must also be alert to their management style:

- 'I have witnessed behaviour […] that I believe would not (and should not) be tolerated from men in a similar position (bullying and harassment) under the guise of being confident, high-achieving women' (P177, 25–34).

This relates to findings that the paths of junior clinical academics were blocked by successful female senior clinical academics who had experienced difficulty in career progression and expected others to negotiate the same tricky path.[7]

Racism

Respondents from racialised minority backgrounds reported that progress is difficult to make:

- 'I felt I needed to prove that I am not only at the same level as my peers but significantly better' (P24, 45–54).

Another academic described why they thought it was harder for those from a racially minoritised background to be promoted:

- 'Although there seems to be objective promotion criteria in academic institutions, in reality, meritocracy is subjective. The promotion bar for racially minoritised clinical academics is set higher when you compare the actual level of competence, capability and experience of white male academics who already hold leadership and senior roles in dental academia' (P113, 45–54).

In the case of female academics from a racialised minority, there is risk of further slowing of career progression from discrimination and inequality due to intersectionality. Being female and from a racially minoritised group overlap and become interdependent systems of discrimination.[17,18] This is reflected in the question raised in one comment:

- 'How many minority ethnic female dental deans are there?' (P139, 45–54).

Individuals, or groups of individuals, can overtly or unwittingly add to the burden of institutional or structural racism, through microaggressions – intentional,

or unintentional, verbal, behavioural, or environmental slights that communicate hostile, derogatory, or negative attitudes toward stigmatised or culturally marginalised groups.[19] Examples were given of observed microaggressions:

- 'I have witnessed people being dismissive or ignoring staff/students of ethnic minority' (P88, 45–54)
- 'Your presentation was good, but you need to learn to speak correct English' (P84, 35–44).

Discrimination has an impact on individuals and the dental workforce. There was a tone of resignation in some responses, where people felt their only option for a promotion would be to move institution. Internalised racism and the subjective experiences of discrimination (including microaggressions) are psychosocial stressors which can worsen health outcomes; some of our respondents described how their personal health had been affected by being overlooked.[20] Comments indicated that people were considering leaving dentistry because of discrimination, thus impacting the diversity of dental academia and the visibility of role-models for future academics:

- 'A lot of my Asian colleagues for example see academic dentistry as "not for them"' (P29, 45–54).

Opportunity

Awareness of opportunities to develop and demonstrate skills required for promotion were regarded as being important for career progression. This was highlighted by one comment:

- 'Without appropriate experience and exposure, potential of individuals will not be realised, and candidates thus deprived, will at interview be outclassed by those who have lesser potential but have had doors opened for them' (P95, 55–64).

Responses suggested that opportunities were not available to everyone. There were references made to dental academia being the 'dental equivalent of the Masons' (P83, 45–54), suggesting that there is a perception of a pervasive patriarchal culture within academia, with roles being decided 'on the golf course' (P83, 45–54), echoing reports of female clinical academics being denied opportunities to contribute to important decisions discussed in male-only environments.[13]

Within academia, career progression is linked to the ability to evidence the attainment of esteem indicators, such as presenting at conferences, which can require people to leave home for extended periods:[13]

- 'Progression is highly competitive and is dependent on grants and papers (or other equivalent achievements). It is difficult to achieve these targets while dealing with family responsibilities' (P86, 45–54).

There were comments reflecting that circumstances can affect opportunity before people enter an academic career, illustrating the effects of intersectionality early in life:

- 'BAME [sic] individuals often come from a low socioeconomic background and do not often have equal opportunities at a very early start. This puts them at a disadvantage on what they could achieve academically, meaning that they are not in a good position to compete for competitive academic jobs' (P82, 35–44).

Staff with a lower socioeconomic background felt this was a barrier to opportunity, particularly in the early career stages:

- 'I am aware that my low SES [socioeconomic status] background does impact on my work […] I don't have access to the same networks that others might and I know this impacts on my chances […] early on in my career I had no help with writing job applications or interview prep and this was a problem for me' (P175, 35–44).

Comments gave examples of how disability and additional learning needs can affect the opportunity to meet esteem indicators:

- 'Everything is so "word" orientated. The format by which "esteem" is recognised does not come naturally for someone with dyslexia. I do not have a back catalogue of presentations, papers, prizes and so I do not tick the right boxes' (P158, 35–44).

Support

Mentorship and support came through strongly as enablers of career progression:

- 'I have had excellent support and encouragement from my line manager, while I know some colleagues aren't as lucky' (P171, 35–44).

Previous research has also indicated a supportive environment to be a key enabler for staff retention in clinical acedmia[21,22] and use the 'language of luck'.[23] In our study, not having a supportive team was said to be 'lonely and isolating' (P62, 35–44) and respondents stated that those who had received coaching appeared to progress more easily.

Comments stated that people benefited from role models they could relate to and that a lack of diversity, especially in senior positions, would affect:

- 'The aspirations of students and junior staff in terms of seeing people like themselves represented in the profession' (P58, 45–54).

This view is shared by dental students.[24] One comment suggested that there was hope for racially minoritised junior dental professionals, with current increased awareness of systemic bias and inequity, but concern was raised for those who are navigating higher up the system:

- 'I suspect that if something is done it will most likely inequitably focus on the younger generation, leaving those who have suffered most to continue being unsupported' (P83, 45–54).

Individual perspectives of diversity and discrimination

Comments presented a spectrum of understanding of diversity and discrimination in dental academia. One response – 'I have no access to the data' (P38, 35–44) – was interesting: does discrimination only exist if data are there to support it?

Evidence and visibility of discrimination appeared to be important; this was one view:

- 'The only way to get beyond alleged discrimination is to be blind to our differences rather than constantly highlighting them when it doesn't need to be done in the absence of any directly observed issues' (P15, 45–54).

In some cases, visible diversity was stated as evidence that there were no barriers to career progression, but other comments recognised that an appearance of diversity did not necessarily equate to an absence of discrimination. These varying responses highlight the complexities of this issue.

Some people reflected upon how their life and career path will have been favourably influenced by white privilege and recognised that those from racialised minorities will have been adversely affected by systemic racism and unconscious bias:

- 'The problems are so endemic in society and have been for so long that it would

be folly to assume that dental schools are somehow immune' (P51, 25–34)
- 'The first time I met someone from an African Caribbean background who had been to university was 1978 in Birmingham and so that might explain the paucity of professor and lecturers from this background in my age group' (P116, 64+).

However, while comments acknowledged historical and current problems of racism and inequity, concerns were raised that positive discrimination may now result:
- 'I do feel that it is rather disingenuous that people who don't have such characteristics may now themselves be disadvantaged, particularly as it was the people who may well by now have retired that have gained such an advantage' (P136, 45–54).

There were comments stating that promotions in dental schools were entirely related to performance, capability and professionalism. However, respondents identified that meritocracy is still subjective, and another explained that:
- 'Current arrangements which may offer a veneer of "equality" while being inherently unfair, with lots of opportunity for unconscious bias and in some cases, active, if covert, discrimination. It takes only a little unfairness, a little less mentoring, a small piece of malice, a little discouragement, to disadvantage a candidate enough so that she (usually) or he may not perform so well' (P95, 55–64).

This highlights the need for staff education at all levels to increase understanding of difference and prejudice and to create a supportive environment.[23]

Academic and institutional culture

Work-life balance

Regardless of protected characteristics, academic culture is a challenging environment to work in[19] and our survey respondents recognised this:
- 'I think we are asked to do more work than we can fit into the day [and] are measured against targets that cannot be delivered in 9–5 or 8–6 roles' (P171, 35–44)
- 'Clinical academic careers are incredibly challenging and staff always work more hours than they are contracted. Being a parent of young children prevents you from doing this and therefore, it is difficult to match the achievements of colleagues' (P52, 35–44).

It was suggested overperformance then becomes the expectation for all staff but that this is hard for those with dependants. This is a complex issue, complicated by historically gendered work and home environments; women in academia have described work-life balance as an impossibility and carry a burden of guilt if they feel they have compromised family life.[20]

Part-time working

Part-time working was felt to be a barrier to career progression by some respondents because of 'an inherent attitude that if you are part time you aren't a "serious" worker' (P25, 35–44). Respondents stated female staff are more likely to want to work part-time, which can affect promotion to senior roles which are 'not offered to women as they are "full time roles"' (P65, 35–44). It was suggested that better flexible working or job-sharing options could help career progression into more senior and managerial roles, as people would get relevant leadership experience while maintaining a part-time role.

Reporting structures

It was clear that some institutions had reporting structures allowing people to raise concerns, although there were suggestions that these systems may not be 'robust enough and as accessible as claimed' (P122, 35–44). Respondents felt discomfort when deciding whether to report incidents; one respondent explained that they opted out of whistleblowing because they felt it would end their career. Where reporting structures are in place, it is important that complaints are handled appropriately. Although related to a patient making a complaint, this survey response is an example of how there may be some discomfort around talking about racism:
- 'I had a patient make a complaint in which he used racial slur and requested a new dentist. I was not informed of the complaint as it was thought to be a difficult conversation' (P22, 25–34).

An important aspect of an equality, diversity and inclusion strategy is the availability of psychologically safe spaces and appropriately trained people to talk to about issues and events without fear of retribution.[25,26] If people feel supported in reporting, it may lead to increased awareness.

Training

References were made to action by universities and dental schools to promote inclusivity and improve equality and equity within them. To some, this training was felt to be tokenistic, but others were more positive:
- '[School name] certainly proactively seeks to be a workplace where prejudice and bias – conscious and unconscious – are eliminated as far as humanly possible (and we have, I think, improved steadily in this respect over the long-term)' (P32, 55–64).

Some respondents reflected positively upon their learning from this training, but there was still concern that with the problem of systemic bias in society, and with racism being a societal problem, issues will not be 'fixed' (P136, 45–54) by changes in academia alone. This could provide opportunity for dental schools to share learning and promote change.

Limitations

The data and subsequent analysis lack the depth that interviews would have provided. In surveys related to job satisfaction, those with job dissatisfaction may be overrepresented in free-text comments.[16] Response bias is likely because the survey is unlikely to have been distributed in the same way within each dental school. Completion rates vary significantly by school. Additionally, staff with more personal interest in the topic will have been more likely to complete the survey. We acknowledge that our findings will be affected by non-response bias, especially as negative comments outweighed the positive, and fewer responses were from men. The difference between the Dental Schools Council estimate that 72% of dental academics overall are white and 55% male, compared to 85% and 45% of respondents to our survey, also suggests that results cannot be considered to be representative. The difference could be accounted for by differences in time available, difficulty with the question set, differing levels of seniority, or higher inclusion rates in schools with lower levels of diversity. In terms of gender, it could also reflect changes since the latest Dental Schools survey in 2017. It is important that we acknowledge that the data provide a perspective from the point of view of a mainly white sample who responded. However, this is less important in qualitative than quantitative research, as results are not

expected to be generalisable. They do capture opinions and perspectives that exist for the people working with dental academic settings who responded.

It is likely that self-selection bias would also have affected recruitment to interviews and the narrower breadth of this method may not have allowed us to obtain such a 'snapshot' of opinion and experience. We acknowledge that 84% of the responses were submitted by white participants, which may affect transferability of our findings. This survey will be repeated in 2026 and the use of the same free-text items will facilitate comparison between time points.

Conclusion

Within dental academia, there remain staff who perceive barriers to career progression based on protected characteristics. Academics have reported that they have personally experienced, or directly observed, discrimination in their work role. Many were satisfied with their own career progression but there was a proportion of staff who expressed dissatisfaction and attributed this to discrimination based upon protected characteristics. More positively, there were suggestions that the culture in dental schools is beginning to change to address factors contributing to inequality in dental academia.

It appears that mentoring and improved reporting systems are having a positive impact on the experience of discrimination and could be further developed to maximise this advantage. However, it is important to acknowledge that a survey of dental school staff does not capture those who have left the profession and it would be important to sample these views as well. Although the sense of people with certain characteristics missing out on opportunities is far from universal, it would also seem sensible to ensure the presence of diversity on selection and promotion panels. It will also be important to monitor whether improvements occur over the next few years with increased awareness of these issues.

Ethics declarations

The authors have no conflicts of interest to disclose. Ethical approval was obtained from Newcastle University (5023/2020) for the distribution of an anonymous online survey to staff in all schools in the UK and Republic of Ireland. All participants gave informed consent.

The data that support the findings of this study are not publicly available due to privacy and ethical restrictions.

Author contributions

Zoe Freeman conceived the research idea, developed the survey, analysed the results and wrote the manuscript. Chris Penlington conceived the research idea, developed the survey, wrote and revised the manuscript. Hawa Fathi developed the survey, analysed the results and revised the manuscript. Khaleel Shazada developed the survey, wrote and revised the manuscript. Paula Waterhouse conceived the research idea, developed the survey, analysed the results and wrote the manuscript. All authors have agreed to the final submitted version of the manuscript.

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References

1. Phillips K. What is the real value of diversity in organisations? Questioning our assumptions. *In* Page S (ed) *The Diversity Bonus: How Great Teams Pay Off in the Knowledge Economy.* pp 223–245. Princeton: Princeton University Press, 2017.
2. UK Government. Equality Act 2010. 2010. Available at https://www.legislation.gov.uk/ukpga/2010/15/contents (accessed July 2023).
3. Surash S. Racial equality in the NHS: we need objective data to support subjective experience. *BMJ* 2020; DOI: 10.1136/bmj.m4496.
4. Newton J T, Thorogood N, Gibbons D E. A study of the career development of male and female dental practitioners. *Br Dent J* 2000; **188:** 90–94.
5. Gasman M, Abiola U, Travers C. Diversity and senior leadership at elite institutions of higher education. *J Divers High Educ* 2015; **8:** 1–14.
6. Boncori I. The Never-ending Shift: A feminist reflection on living and organising academic lives during the coronavirus pandemic. *Gend Work Organ* 2020; **27:** 677–682.
7. Brown J V, Crampton P E, Finn G M, Morgan J E. From the sticky floor to the glass ceiling and everything in between: protocol for a systematic review of barriers and facilitators to clinical academic careers and interventions to address these, with a focus on gender inequality. *Syst Rev* 2020; **9:** 26.
8. Dental Schools Council. Clinical academic staff survey. 2018. Available at https://www.dentalschoolscouncil.ac.uk/clinical-academia/clinical-academic-staff-survey/ (accessed July 2023).
9. Lala R, Baker S R, Muirhead V E. A Critical Analysis of Underrepresentation of Racialised Minorities in the UK Dental Workforce. *Community Dent Health* 2021; **38:** 142–149.
10. Neville P. The 'leaky' BAME pipeline in UK dentistry. *Br Dent J* 2022; DOI: 10.1038/s41415-022-3930-6.
11. Thomas C, MacMillan C, McKinnon M *et al.* Seeing and Overcoming the Complexities of Intersectionality. *Challenges* 2021; **12:** 5.
12. Crenshaw K. Demarginalizing the Intersection of Race and Sex. A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics. *University of Chicago Legal Forum* 1989; **1:** 139–167.
13. Shazada K, Freeman Z, Fathi H, Waterhouse P, Penlington C. Diversity and Career Progression in Dental School Staff in the UK and Ireland. *Preprints* 2021; DOI: 10.20944/preprints202111.0147.v1.
14. Bhaskar R. Critical realism and the ontology of persons. *J Crit Realism* 2020; **19:** 113–120.
15. Pye Tait Consulting. General Dental Council Dental Professionals Survey. 2019. Available at https://www.gdc-uk.org/docs/default-source/research/2019-dental-professional-survey--findings.pdf?sfvrsn=65c3d6d2_8 (accessed July 2023).
16. O'Cathain A, Thomas K J. 'Any other comments?' Open questions on questionnaires – a bane or a bonus to research? *BMC Med Res Methodol* 2004; **4:** 25.
17. Sambunjak D, Straus S E, Marušić A. Mentoring in academic medicine: a systematic review. *JAMA* 2006; **296:** 1103–1115.
18. Jones C. Falling between the Cracks: What Diversity Means for Black Women in Higher Education. *Policy Futures Educ* 2006; **4:** 145–159.
19. Gill R. Breaking the silence: The hidden injuries of neo-liberal academia. *Feministische Studien* 2016; **34:** 39–55.
20. Toffoletti K, Starr K. Women Academics and Work-Life Balance: Gendered Discourses of Work and Care. *Gender Work Organis* 2016; **23:** 489–504.
21. Iversen A C, Eady N A, Wessely S C. The role of mentoring in academic career progression: a cross-sectional survey of the Academy of Medical Sciences mentoring scheme. *J R Soc Med* 2014; **107:** 308–317.
22. Lubienski S T. Celebrating Diversity and Denying Disparities: A Critical Assessment. *Educ Res* 2003; **32:** 30–38.
23. Diversity in Dentistry Action Group. Equality Diversity and Inclusion within Dentistry: A profession wide commitment. 2021. Available at https://bda.org/advice/Coronavirus/Documents/equality-diversity-and-inclusion-in-dentistry-ddag.pdf (accessed July 2023).
24. Kadiyo T, Mellish V. Black Lives Matter: the impact and lessons for the UK dental profession. *Br Dent J* 2021; **230:** 134–142.
25. The King's Fund. Workforce race inequalities and inclusion in NHS providers. 2020. Available at https://www.kingsfund.org.uk/publications/workforce-race-inequalities-inclusion-nhs (accessed July 2023).
26. US Equal Employment Opportunity Commission. Select Task Force on the Study of Harassment in the Workplace. 2016. Available at https://www.eeoc.gov/select-task-force-study-harassment-workplace (accessed July 2023).