treatment standards in the UK had failed to keep pace with advances being made elsewhere in the world and were now viewed by our overseas colleagues as being more appropriate for a developing country. It was only with the introduction of the two-year MSc course in orthodontics of the University of London in the same year, masterminded by Professors Mills and Houston, that things began to slowly change, culminating in the introduction of the three-year MOrthRCS and MDO RCPS programmes in 1988. The provisions of these made it clear that the undertaking of a research component was part of specialty training in orthodontics, as it now is throughout the western world, and many of us sat the new diploma examination voluntarily to show our support for this much-needed raising of UK standards. Finally, following the publication of the Mouatt Report in 1995, which supported the introduction of specialist lists in the UK,¹ an Accord was negotiated by Dame Margaret Seward between the General Dental Council, the Royal Colleges and universities.² This recognised the 'key roles that the faculties, the universities and the specialist societies played in the formulation of curricula and syllabi'.³

While the costs of orthodontic specialty training might now be renegotiated, the present standards and responsibilities must not be compromised.

C. D. Stephens OBE, Bristol, UK

References

1. NHS Executive. *Report of the Chief Dental Officer on UK specialist dental training*. London: HMSO, 1995.
2. General Dental Council. *The accord between the General Dental Council and the dental faculties of the Royal Surgical Colleges and other educational bodies*. London: General Dental Council, 1996.
3. Seward M. *Open wide – Memoir of the Dental Dame*. pp 175. Durham: The Memoire Club, 2002.

<https://doi.org/10.1038/s41415-022-3890-x>

Health research

Satisficing and bots

Sir, online recruitment is expanding in health research with sources for possible study volunteers including classified ads, search engine ads, survey panels, crowdsourced online labour markets and social media platforms. Social media recruitment is increasingly popular as most adults use it and rates exceed 60% in practically every sociodemographic category.¹ Secondly, social media sites allow

researchers to tailor adverts to those who are likely to meet study eligibility criteria. Thirdly, the practical and ethical issues of social media recruitment for health research is extensively defined.

However, studies using such recruitment have the same challenges as other online research approaches. Duplicate enrolment, automated enrolment by software applications known as bots, random responses and satisficing all threaten sample validity and data integrity. In a survey, responses can be chosen at random by tapping a random, rather than the appropriate, key. Even a small number of random responses can skew results. Bots (aka automated form fillers) are computer programs that randomly fill up web forms. Satisficing, on the other hand, is a method of reducing cognitive burden by skimming instructions and inquiries. Participants who satisfice choose answers that would seem to fit the question, or respond randomly.

A cross-sectional descriptive study using a web-based survey recruited volunteers via email and Facebook.² Analysis showed that about 60% of completed surveys were fraudulent, underscoring the importance of addressing sample validity and data integrity in social media-based health research.

Open-ended questions are excellent for spotting satisficing, inattention and, most crucially, bots, as is attention to incomprehensible responses or replies made up entirely of random characters. Attention checks are used to assess a participant's comprehension of pre-task instructions. While not confirmation of cheating, failing to read instructions may raise suspicion and prompt a closer look at the participant's data. During the survey, random questions on the survey's objectives may be asked to ensure the participant's comprehension.

Participants finishing a survey in an unusually short period of time may have satisficed or offered random replies, while in a knowledge-based activity, if they have taken longer than expected, they may have studied the answers rather than basing them on their present knowledge. To keep bots out of a study, incorporating a cognitive challenge as a pre-screen condition that must be passed before moving on to the main study may be a good idea. reCAPTCHA is the most widely used way for completing these tasks online.

Combining some of these strategies and techniques may assist to reduce satisficing and random human and bot responses.

A. Venugopal, Chennai, India; A. Marya, Phnom Penh, Cambodia; B. Ludwig, Homburg/Saar, Germany; M. K. Alam, Aljof, Saudi Arabia

References

1. Pew Research Center. *Social Media Fact Sheet*. Washington: Pew Internet and American Life Project, 2019. Available at: <https://www.pewresearch.org/internet/fact-sheet/social-media/> (accessed June 2021).
2. Dewitt J, Capistrant B, Kohli N *et al*. Addressing participant validity in a small internet health survey (the Restore Study): protocol and recommendations for survey response validation. *JMIR Res Protoc* 2018; doi: 10.2196/resprot.7655.
<https://doi.org/10.1038/s41415-022-3891-9>

Hospital dentistry

Integration with medicine needed

Sir, in 2015, the Brazilian Federal Council of Dentistry first recognised the practice of hospital dentistry as an official qualification.¹ One of the main intentions of this qualification was the provision of regular hospital dental care on an outpatient basis, to systemically compromised patients, including (for example) patients with cancer or haematological disorders. In addition, work in intensive care units (ICUs) is indicated within the qualification's remit, given the widely accepted evidence of a reduction in cases of hospital-acquired pneumonia in patients supported by dental teams in this environment. During the pandemic, the work of dental teams in ICUs has proven essential for the proper holistic management of severe COVID-19 cases, most pertinently those requiring mechanical ventilation.^{2,3}

However, specialties with specific attributes relevant to this qualification are not routinely offered as part of the undergraduate dental curriculum in Brazil. In addition, there is a worrying lack of knowledge amongst most medically trained professionals about the benefits of the work dentists can and should undertake as part of the multidisciplinary hospital team. Combined, the above currently results in low interaction between doctors and dentists,⁴ leading to less favourable outcomes for patients.

In light of this mismatch, urgent measures to modernise the curriculum of undergraduate dentistry courses are required. The inclusion of an appreciation for, and exposure to, specialties such as

critical care medicine are essential in this context. A further fundamental point of change needed is the establishment of greater integration between doctors and dentists during both undergraduate and postgraduate training, via the implementation of hospital placements for dentistry students, mainly in ICUs. It is our belief that this would open the door to closer interdisciplinary work between medicine and dentistry, both with a renewed appreciation for the other, ultimately leading to patient health benefit.

M. R. Tovani-Palone, Ribeirão Preto, Brazil;
T. Franchi, Sheffield, UK

References

1. Federal Council of Dentistry. Resolution CFO-162/2015. 2015. Available at: <https://website.cfo.org.br/wp-content/uploads/2015/12/ResolucaoCFO-162-15.pdf> (accessed October 2021).
2. Sacoar S, Chana S, Fortune F. The dental team as part of the medical workforce during national and global crises. *Br Dent J* 2020; **229**: 89–92.
3. Tovani-Palone M R, Shamsoddin E. Use of mouthwashes in the management of COVID-19 patients in intensive care units: Recommendations and current evidence. *Einstein (Sao Paulo)* 2021; doi: 10.31744/einstein_journal/2021CE6419.
4. Molayem S. Dentists and doctors need to play on the same team. *Nature* 2021; doi: 10.1038/d41586-021-02919-3.

<https://doi.org/10.1038/s41415-022-3892-8>

Occupational health

Dental workers' vaccination

Sir, I was surprised reading in *The Times* (17 December) that a survey had reported that many dental workers, particularly dental nurses, were unvaccinated against COVID-19. The requirement for frontline health staff to be fully vaccinated by 1 April 2022 could indeed see an exodus of staff which will exacerbate difficulties providing dental care during the pandemic.

Patients are already having access problems and will not appreciate having the additional worry of wondering whether their dentist or dental nurse is vaccinated. We can all take a lateral flow test at home but that is not the answer. Vaccination for

COVID-19 has been available for a year and it is not unreasonable for the profession to ensure that all personnel are fully vaccinated, unless there are valid medical reasons to the contrary, by 1 April. No one objects to vaccination against hepatitis B. I would not knowingly want to be treated by a team where one or more members were deliberately putting patients and themselves at unnecessary risks.

J. Clewett, Wrexham, UK

<https://doi.org/10.1038/s41415-022-3893-7>

NHS dentistry

Moaning Minnies

Sir, I am getting sick of reading how my 'NHS dentist' colleagues are moaning about their burden of work. They need to remember two facts about the last two years: they have effectively had massive pay rises since the pandemic started; they are independent contractors who have chosen to take out a contract with the NHS.

During 2020, my 'NHS' colleagues had months when they were paid their full contract value while providing no patient care. They then had to only provide 20% of their contracted UDAs and then a bit more. That effectively increased the value of each UDA by about 500% at a time when those working on the frontline of the pandemic were offered a paltry 1%. How dare those dentists, and the BDA, moan about the unfairness of their supposed plight when they had had a 500% pay rise! In the meantime, some of us were continuing to care for patients, as best we could, and ended up being investigated by the CQC for daring to provide the emergency services that my 'NHS' colleagues had failed to provide. At the same time, I was hearing from my youngest colleagues that their practice principals were refusing to pay them anything, while the practices/principals pocketed the lot.

Last year, those same dentists had to fulfil 65% of their contracted work, which

is still the equivalent of a 53% rise in the value of each UDA. Despite that, I have read much whingeing about not being able to afford this or that. This is where they need to remember that they are independent contractors and it is therefore their responsibility to ensure that their premises are adequately equipped, at their expense.

There is an alternative view. Back in the 1960s, the then Health Secretary, Sir Keith Joseph, declared that the country could not afford to continue funding both the Armed Forces and the NHS dental services. Ever since then, successive governments, regardless of their political persuasion, have made it increasingly difficult for dentists to provide a decent level of patient care while maintaining profitability for their practices. After each new contract, there would be a golden couple of years before 'clawback' would happen, and the metaphorical thumbscrews would be applied.

These last two years have been a financially golden period for my 'NHS' colleagues and I dread to think what pressures will be applied to them in the next few years, in order for the Treasury to recoup its vast overspend on the dental sector of the NHS.

C. Marks, Southampton, UK

<https://doi.org/10.1038/s41415-022-3894-6>

Correction to: Further filler complication

The original article can be found online at <https://doi.org/10.1038/s41415-021-3785-2>.

Journal's correction note: Letter *Br Dent J* 2021; **231**: 726.

When this letter was originally published, the second author's name was omitted. The authors of this letter are A. Al-Najjar and R. Graham.

The journal apologises for any inconvenience caused.

<https://doi.org/10.1038/s41415-022-3895-5>