

SHORT PAPER SESSION B2

B2.1 Medical imaging students viewpoints of the clinical placement learning environment: A cross-sectional study of years 3 & 4 students of medical imaging in Ghana

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Background

Clinical placements are vital to medical imaging education, bridging the gap between theoretical learning and practical application in the real world.^{1,2} These experiences enable students to acquire essential knowledge, skills, and professional attributes required for clinical radiography practice. ³ A comprehensive health education integrates classroom-based theoretical instruction, which provides a scientific foundation for the profession, with clinical placements, which play an indispensable role in shaping students' professional competence and capabilities.^{2,4} Typically, students in medical imaging programs spend most of their training in clinical placements, where they observe professionals, interact with patients and perform procedures under supervision. ⁵ This study evaluates the clinical placement learning environment from the perspective of Year 3 and Year 4 medical imaging students in Ghana.

Methods

A quantitative cross-sectional survey was conducted using a self-administered questionnaire distributed via social media. The survey explored supervision and support, learning integration, and clinical environment equity. Descriptive and inferential statistics were used to analyse the data.

Results

253 students participated, with the majority being male (65.2%) and aged 18-24 years (85.8%). Positive perceptions were noted in supervision and support ($p<0.001$), learning integration ($p<0.001$), and environment equity ($p<0.001$). However, challenges such as overcrowding (25.9%), increased workload (25.5%), and equipment breakdowns (18.9%) were significant concerns.

Conclusion

While students generally report positive experiences, challenges such as overcrowding, limited supervision, and resource constraints hinder optimal learning. Addressing these issues through structured supervisor training, improved infrastructure, and enhanced coordination between academic and clinical settings is crucial for fostering a supportive clinical placement environment.

1. Jeyandrabalan, M., Punch, A., Rogers, J.M. and Jimenez, Y.A., 2022. Insights into Diagnostic Radiography students' perception of clinical stressors. *Radiography*, 28(2), pp.499-505.
2. Ofori-Manteaw, B., Yeboah, H.S. and Wuni, A.R., 2024. Enhancing radiography education: The roles and challenges of preceptors in the clinical supervision and training of student radiographers. *Radiography*, 30, pp.149-155.
3. Kumsa, M.J., Lemu, B.N., Nguse, T.M., Omiyi, D.O. and Akudjedu, T.N., 2022. Clinical placement challenges associated with radiography education in a low-resource setting: A qualitative exploration of the Ethiopian landscape. *Radiography*, 28(3), pp.634-640.
4. Ago, J.L., Kilgour, A. and Smith, C., 2024. Understanding the current situation of challenging clinical interactions for medical radiation undergraduates: An integrative literature review. *Radiography*, 30, pp.104-113.
5. Ondari, B.O., Rajeswaran, L., Ekemiri, K.K., Xavier, S.F. and Baptiste, N.J., 2019. Experiences of medical imaging students and clinical learning in a limited resource setting-a qualitative study in Rwanda. *Journal of Global Radiology*, 5(1).

B2.2 Exploring apprentice motivations for choosing the degree apprenticeship pathway into diagnostic radiography

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Background

The diagnostic radiographer degree apprenticeship (DA) pathway was first introduced in 2020 allowing an alternative pathway to help widen participation¹. Whilst experiences of studying on a DA programme were previously explored², little was known as to the true motivations of apprentices and how this will help in the recruitment of diagnostic radiographers to the NHS.

Method

A single higher education institution cohort of radiography apprentices (n=27) were invited to complete an online survey to determine the campus-based research. A quantitative survey used both open and closed ended questions to gain demographic and more detailed responses. Participants were asked to rank the options to identify what was most important to them and discuss their top three choices. Thematic analysis following Braun and Clarke's six steps³ was used to interpret the data, to analyse and depict patterns to gain a deeper understanding.

Results

20 complete responses were received with a response rate of 71%. Four key themes were identified from the research with apprentices ranking the lack of financial implications as most important, followed by family and lifestyle commitments, then learning on-the-job and finally the opportunity for career progression.

Conclusion

Identifying apprentice motivations has allowed organisations to see what a positive impact the radiography apprenticeship has had on apprentices in allowing them to become diagnostic radiographers. This enables the continuation of the DA program and allows both universities and the NHS to have a better understanding and ultimately help in the recruitment of much needed diagnostic radiographers.

1. Green, D. Heales C.J. (2024) Radiographer degree apprenticeships: where are we now? *Imaging and Oncology*
2. Green, D., Heales, C.J., Hughes, D., Marsden, A., & Mills, J.A. (2022). Exploring current undergraduate student perspectives on the introduction of the degree apprenticeship scheme in diagnostic radiography - a single institution study. *Radiography*, 28 4, 1058-1063
3. Braun, V. Clarke, V. Terry, G. Hayfield. G (2018). "Thematic Analysis." In *Handbook of Research Methods in Health and Social Sciences*, edited by P. Liamputtong, 843–860. Singapore: Springer

B2.3 Perceived stress levels and imposter syndrome in medical imaging students on the traditional and apprenticeship BSc and MSc programmes

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Background

Research has shown elevated perceived stress (PS) and Imposter Phenomenon (IP) levels among healthcare students. Despite rising student numbers, apprenticeship radiography courses remain understudied.

This study aimed to compare the levels of PS and IP between Medical Imaging students on traditional (BSc UG) and apprenticeship (BSc DA and MSc DA) courses at one university in the United Kingdom.

Methods

The study used an online survey to assess PS and IP using the Perceived Stress Scale (PSS-10) and the Clance Imposter Phenomenon Scale (CIPS) respectively. Open text questions allowed for explanation of answers. Statistical analysis and thematic analysis were undertaken.

Results

PSS-10 (n=49 responses)

BSc DA students had a lower level of PS ($\bar{\chi}=18$, $p<0.05$) than BSc UG and MSc DA students ($\bar{\chi}=24$). Most respondents reported moderate or high levels of stress. Thematic analysis highlighted stressors included university and personal factors and overlap between the two areas.

CIPS (n=45 responses)

The highest levels of IP were in BSc UG students ($\bar{\chi}=71$) and the lowest in the BSc apprentices ($\bar{\chi}=63$), however, $p>0.05$. Over 60% of all students had clinically significant IP levels. Thematic analysis found feelings of 'not belonging' and 'self-perception' enhanced feelings of IP, and self-belief was protective.

Conclusion

Most students continue to have high levels of PS and IP regardless of course. Qualitative responses for both found similar contributing factors for all courses; however, 'not belonging' only contributed to IP for BSc UG students suggesting the increased clinical time apprentices experience may be beneficial.

B2.4 Student's perceptions of using escape rooms as an experiential learner-centred revision activity - a pilot study

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Background

Escape rooms as a learner-centred activity are being used more frequently in medical education (Guckian, et al., 2020). For 24-25 the first year undergraduate Diagnostic Radiography students at the University of Salford participated in an escape room, intended to pilot an end of term revision activity. The game theory-based escape room followed a simple game loop: a challenge (e.g. a locked box), a solution (e.g. a combination), and a reward (e.g. a clue inside the box). The learners worked in teams of 5 and had 30 minutes to escape by solving puzzles on appendicular skeleton anatomy, medical terminology, radiographic positioning and projections.

Method

A survey was used to evaluate students' perceptions of their learning, engagement, and skills utilized during the activity. The evaluation study was approved by the University of Salford's Ethical Approval Panel (Ref: 1245).

Results

A 61% (55/90) response rate was achieved. Learners enjoyed the escape room format. There was strong agreement that the activity supported their team-working and communication skills, while being an engaging way of covering module content. Learners appreciated puzzles linked to the intended learning outcomes and felt that the activity supported identifying gaps within their knowledge and improved terminology comprehension.

Conclusion

While the intention of the escape rooms was to engage learners with the module specific learning objectives, survey respondents placed value on developing team-working and communication skills. Escape rooms may be an engaging opportunity for radiography learners to revise content and hone soft skills essential to the profession; subject to further study.

Guckian, J., Eveson, L., & May, H. (2020). The great escape? The rise of the escape room in medical education. *Future healthcare journal*, 7(2), 112–115. <https://doi.org/10.7861/fhj.2020-0032>

B2.5 Reflections on the experiences of a diagnostic and therapeutic radiographer as members of Health Research Authority Research Ethics Committee

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Background

Health Research Authority Research Ethics Committee (HRA REC) evaluates research applications and provides opinions on their ethical acceptability. A national drive to speed up commercial clinical trial setup in the UK saw the government increase investments in research delivery and changes in legislation enabled the HRA to streamline approvals processes for research studies. The HRA expedited recruitment to increase REC members to 883 volunteer members in post in 2023/2024 to improve turnaround target times.

Purpose

We aim to break down perceived barriers to research and show projects need not be reframed as audits or service evaluations to bypass REC reviews. Through shared experience, the authors wish to alleviate anxiety associated with REC reviews by humanising committee members.

Additionally, we highlight volunteering as REC members meaningfully contributes to the research community, learning about a variety of topics and research methodologies and processes along the way.

Summary of content

We will compare and contrast the journey of diagnostic versus therapeutic radiographers as newly appointed HRA REC members. Through shared journeys, we aim to foster a sense of unity and collaboration among radiographers and researchers, delving into personal experiences, challenges, learning, and contributions as REC members. We will provide insights into imposter syndrome, personal growth, and highlight the importance of collective effort in advancing research and improving patient care. Through their roles in HRA REC, we show how imaging professionals can contribute to the broader research community, breaking down barriers and building a supportive network for future advancements.

1. Health Research Authority (2025) Research Ethics Committee Review. Available at: <https://www.hra.nhs.uk/approvals-amendments/what-approvals-do-i-need/research-ethics-committee-review/>

2. Health Research Authority (2024a) '£100 million of investment in new research hubs announced today'. Available at: <https://www.hra.nhs.uk/about-us/news-updates/100-million-of-investment-in-new-research-hubs-announced-today/#:~:text=%C2%A3100%20million%20of%20investment,announced%20today%20%2D%20Health%20Research%20Authority>

3. Health Research Authority (2024b) Annual report for Research Ethics Committees (RECs) in England 1 April 2023 to 31 March 2024. Available at: <https://www.hra.nhs.uk/about-us/committees-and-services/res-and-recs/research-ethics-committees-annual-reports/annual-report-research-ethics-committees-recs-england-1-april-2023-31-march-2024/>

4. O'Shaughnessy, J. (2023) Commercial clinical trials in the UK: The Lord O'Shaughnessy review - final report. Available at: <https://www.gov.uk/government/publications/commercial-clinical-trials-in-the-uk-the-lord-oshaughnessy-review/commercial-clinical-trials-in-the-uk-the-lord-oshaughnessy-review-final-report>

5. Richardson, S. and McMullan, M. (2007) 'Research ethics in the UK: What can sociology learn from health?', *Sociology*, 41(6), pp. 1115–1132. Available at: <http://www.jstor.org/stable/42858289>

6. UK Government (2024) '£100 million public-private health research boost'. Available at: <https://www.gov.uk/government/news/100-million-public-private-health-research-boost#:~:text=Funded%20through%20%C2%A3100%20million,Scotland%2C%20Wales%20and%20Northern%20Ireland>