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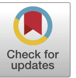
ORIGINAL RESEARCH ARTICLE

You are in charge now: exploration of educational relationships between anaesthetic trainees and their supervising specialists



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Abstract

Background: Much of the education during anaesthesia training occurs in the workplace where trainees work under the close supervision of a more senior anaesthetist. Trainee anaesthetists are exposed to multiple supervisors with whom they form educational and supervisory relationships over the course of their training. Surprisingly little research has been conducted to explore the factors behind the development and maintenance of these relationships. This study explores the process of how education occurs in the workplace by examining the relationship from the perspective of both trainees and specialists.
Methods: This is an exploratory qualitative study. Eight trainee and 10 specialist anaesthetists participated in an individual semi-structured interview. The data were analysed thematically by each of the authors to generate themes.
Results: Six themes were identified in the analysis: (1) sizing up; (2) negotiated autonomy; (3) working closely together; (4) workplace practices; (5) education being valued; and (6) gender. A conceptual model to illustrate the relationships between the six themes was developed.
Conclusions: Supervisory relationships were viewed positively by participants despite impediments such as lack of continuity and busy clinical environments. But there were tensions, particularly in balancing trainee autonomy with patient safety. A nuanced 'sizing up' process, with negotiation of autonomy, was described by both supervisors and trainees. Our findings may support supervisory relationships to reach this ideal more effectively.

Keywords: anaesthetic trainees; autonomy negotiation; educational relationships; gender and training; role modelling; sizing up; supervisory relationships

Effective supervision of postgraduate medical trainees has been linked to improved patient and learning outcomes,[1–8] but our understanding of the supervision process lacks depth. The supervisory relationship between trainee and specialist determines the effectiveness of clinical supervision,[1] and is associated with positive patient outcomes.[2] However, there is a paucity of guidance for either trainees or supervisors as to how to navigate that relationship. Without deeper understanding of the factors influencing the formation and maintenance of this relationship, we risk poorer learning outcomes, and threats to safe practice.

Anaesthesia training offers a sharp focus on the supervisory relationship. 'Good morning, Dr X, I'm Y, your anaesthetic registrar today', is a refrain that echoes throughout operating theatres the world over. We are all familiar with this supervisory dynamic, yet we seldom stop to ask what is really going on under the surface. How does a novice anaesthetist enter the training pathway and emerge some years later as a well-trained junior consultant? What processes are at play while this transformation occurs?

Robust curricula and guidance on *what* to teach is part of the answer. The Royal College of Anaesthetists (RCoA) and

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the Australian and New Zealand College of Anaesthetists (ANZCA) have implemented comprehensive structured training curricula.[9,10] But that cannot be the whole picture; there is a very human dimension to anaesthesia training. The process of supervision – the *how* of teaching in the workplace – also requires attention. This study aims to explore that supervisor–trainee relationship.

Methods

Ethical approval for this study was obtained from the Gold Coast Hospital and Health Service Human Research Ethics Committee (reference: LNR/2021/QGC/76675) and from the Flinders University Social and Behavioural Research Ethics Committee (reference: HREC CIA4737-1). Written informed consent was obtained from all participants.

The study used a constructivist lens. Constructivism is a qualitative paradigm which posits that individuals construct their own understanding and knowledge of the world through experiencing things and reflecting on those experiences.[11] Through that constructivist lens we used grounded theory to develop an interview-based study to better understand the supervisor–trainee relationship. Grounded theory is a qualitative approach which uses observations from real life to develop theory. The theory is thus 'grounded' in the experiences of the participants.[12] This approach lends itself to the exploration of uncharted areas of practice.[13] Using qualitative methodology, the experiences of the individuals involved in the educational process can be unpacked and explored to understand the dynamics of the educational relationship in anaesthesia. The study was designed to be theory generating, rather than hypothesis testing.

Research team

The composition of the research team impacts qualitative research, so we are outlining important factors related to our team here. The team was comprised of both 'insiders' and 'outsiders' to the anaesthetic world. The primary researcher (TH) is a specialist anaesthetist and an ANZCA supervisor of training (UK equivalent: educational supervisor) making him an 'insider' with regard to anaesthetic education and training processes. There are advantages to being an insider when it comes to eliciting information from members of the same craft group and interpreting results. However, the insider lacks the fresh perspective that an outsider may bring to a line of enquiry.[14] As such, EP and VB were included as 'outsiders'. They are both emergency physicians with backgrounds in anthropology and medical education, respectively. Their critical care background makes them well suited to understand enough about anaesthesia training but with a distance to the participants and data that provides a useful alternative lens.

Interviews

We recruited both anaesthetic supervisors and trainees from Gold Coast University Hospital, a large tertiary care centre in Queensland, Australia, from August to October 2021. All members of the department were invited to participate in interviews via e-mail and a convenience sample of those volunteering formed the study participant group. Using a pre-piloted semi-structured interview guide (Appendix 1) TH interviewed the consultant anaesthetists (to capitalise on craft group rapport), whereas EP and VB interviewed the trainee anaesthetists (to minimise problematic power differentials). Interviews were audio recorded and transcribed using Otter AI software (Otter ai, Los Altos, CA, USA). Transcripts were checked for accuracy against the original recording by the interviewers and de-identified before analysis. Interviews were stopped when data sufficiency in the analysis process was reached.

Analysis

We used a cyclical approach to data gathering and analysis, meaning that analysis of initial interviews informed further data collection. We analysed the data using thematic analysis in six interview intervals (sets of three trainees and three supervisors). Thematic analysis is a process during which data are analysed using a six-step process: (1) familiarisation, (2) generation of initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report.[15,16] TH, EP, and VB individually familiarised themselves with the data, coded the data, and searched for themes (steps 1–3) before meeting to discuss their findings. The involvement of multiple researchers in the analysis is a qualitative strategy which seeks to enhance the quality of data interpretation. This initial data analysis informed further interviews (we identified areas that we needed to gather deeper understanding on in addition to completing the semi-structured interview). This step of data analysis was repeated after an additional six interviews, and finally after the last set of six interviews. After 18 interviews, we felt that we had sufficient data, with minimal new codes being identified, to undertake steps 4–6 as it related to the whole data set.

The preliminary findings were shared with all the participants via email together with an invitation to comment and feedback.

Results

We conducted 18 interviews (eight trainee and 10 supervisor). Participant details are outlined in Table 1.

Through analysis we identified six themes: 'sizing up', negotiated autonomy, working closely together, workplace practices, education being valued, and gender. In this section we elaborate on each theme and provide illustrative quotes

Table 1 Participant details.

	Time in the role (yr)	Gender
Trainee 1	3–5	Female
Trainee 2	0–3	Male
Trainee 3	0–3	Female
Trainee 4	0–3	Female
Trainee 5	3–5	Male
Trainee 6	3–5	Female
Trainee 7	3–5	Female
Trainee 8	0–3	Female
Supervisor 1	0–5	Male
Supervisor 2	5–15	Female
Supervisor 3	15 +	Male
Supervisor 4	0–5	Male
Supervisor 5	0–5	Female
Supervisor 6	15 +	Female
Supervisor 7	5–15	Male
Supervisor 8	5–15	Female
Supervisor 9	0–5	Female
Supervisor 10	0–5	Female

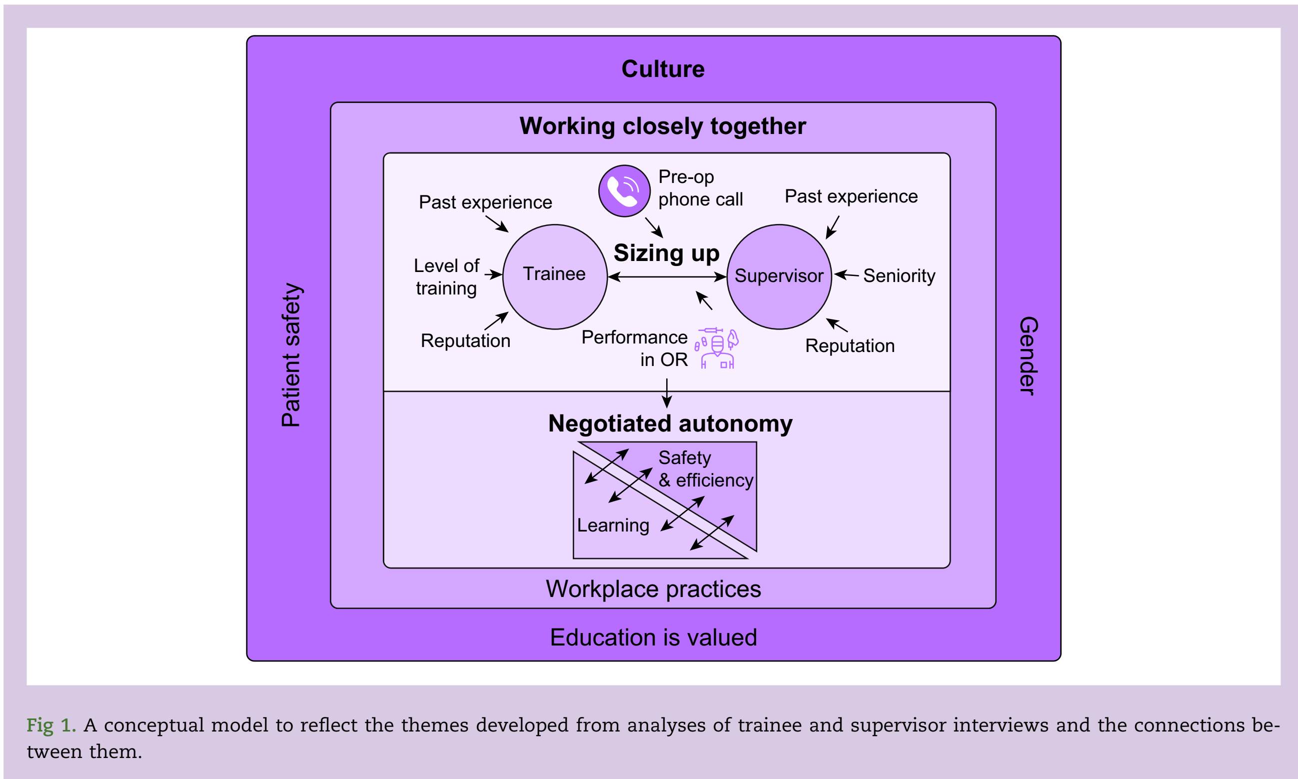

Fig 1. A conceptual model to reflect the themes developed from analyses of trainee and supervisor interviews and the connections between them.

from the interview transcripts. The themes were closely interconnected, and we developed a conceptual model to reflect these connections, illustrated in Fig. 1. Our conceptual model illustrates how the supervisory relationship and process (sizing up, negotiated autonomy) is influenced by workplace practices, and by the context in which supervision occurs. This includes the values and cultural norms within the department and the profession (including education being valued and gender influences).

Sizing up

Participants highlighted that working together required understanding of the other party – their abilities, their quirks, their experience, and their expectations. Both supervisors and trainees described an amorphous process through which micro-judgements informed their initial and ongoing impressions of each other. One participant described this bidirectional process as 'sizing-up', which seems to adequately convey the vague but critical nature of the undertaking.

The 'sizing up' process was informed by several inputs even before the actual interaction took place. Prior experiences between supervisors and trainees were one source of data, but given the size of the department and lack of continuity this was sometimes not an available input. When such first-hand data could not be used to inform the 'sizing-up' process, both supervisors and trainees gathered information via informal networks. For example, one supervisor mentioned that '*you'll get a warning that someone needs a bit more supervision*' (S8) and the trainees informed us that '*registrars talk a lot ... so we all know which bosses are going to be more likely to let us do things*' (T8). Static factors such as level of training and the seniority of supervisors also contributed to micro-judgements. For example, registrars predicted that the '*very junior consultants and provisional fellows have a high threshold for trusting others*' (T4).

The 'sizing up' process continued once the supervisory relationship started in earnest. The preoperative phone call, in which the supervisor and trainee discuss the list for the next day, was critical for impression management and mentioned by almost all of the participants.

> *You'll make your first impression to that particular consultant you've never worked with before. And that they'll come in, in the morning go, 'well, she was an idiot on the phone, you can't trust her with anything' ... so [it is] a reasonably important moment. T7*

This process of sizing each other up continued throughout interactions in the operating theatre. One senior trainee commenting on their role supervising junior trainees said, '*If they talk a loud game, but then struggle in the action. That's the other way you size them up*' (T1), highlighting that 'sizing-up' is a continuous process informed by both words and actions. The continuous judgement could be quite stressful for trainees, who hold less power in the process.

> *You're always on eggshells. It's a huge game. The whole thing is a game. The whole thing is a massive game. T7*

Negotiated autonomy

Related to 'sizing up', and often an outcome of that process, was the degree of autonomy trainees were afforded. Participants agreed that allowing trainees autonomy whilst maintaining a safe level of supervision is important for clinical development. Navigating that was seen as a tricky process requiring careful negotiation on the part of both parties.

Trainees negotiated by signalling that they were engaged and ready to take on responsibility. One trainee said, '*You've*

got to [...] make them aware that you're happy to take on whatever responsibility they're comfortable, to provide to you' (T2). When the balance of autonomy and safety was clear and 'just right', it could be confidence building for the trainee and positive for the supervisor–trainee relationship. For example, one trainee said,

> *This consultant in particular is excellent. He really let me make my plan. He let me talk through my issues, he let me lead, and he supported, but by being supportive, I felt safe, so I could bounce things off him. T1*

However, sometimes the rules of engagement were unclear. In such situations, trainees felt as though they were transgressing unmarked boundaries while simply trying their best to navigate the grey zone between autonomy and safety.

> *I've had that before where I've asserted myself ... and just, it's like you were too confident for your level. ... It's a bit tricky ... what is competent? And what is not competent enough? ... How do you meet that little zone? T7*

Unsurprisingly, this type of interaction resulted in negative perceptions of the supervisor–trainee relationship.

In addition to factors related to the trainee and the supervisor, time of day had significant impact on the autonomy negotiation. There was a marked change in the negotiation after hours when the supervision was more distant and the supervisor had responsibility for several trainees, often supervising from off-site.

> *You sort of go from being, in my opinion, sort of somewhat, oversupervised on the elective list in general, where like, everything you do, depending on the consultant is closely monitored and critiqued. And then, after hours, you sort of like left to be completely by yourself with some very, very high-risk difficult cases. T4*

Despite the complexity of balancing autonomy and safety, supervisors remarked that supervision was not a skill that they had been taught, rather, '*you just develop it over time*' through experience.

Working closely together

The working space can be cramped and crowded in anaesthesia. The physical proximity of trainees and their supervisors to one another as they undertake the sequences of tasks required to safely anaesthetise a patient promotes a close working relationship.

> *I guess that really, it's sort of a job I guess that sort of requires close supervision initially. But then also close observation of a consultant skills as well. And just the physical proximity, I suppose as well. T4*

The proximity means that creation of an environment that is safe for both the trainee and the patient is an important aspect.

> *I think it's someone that can create an environment, which will challenge you, but not scare you. And so, I think that you need to be comfortable in the space that you're in, you can comfortably make mistakes, and not feel like you're going to have your head bitten off, or that you're going to be judged. T5*

This close working relationship has obvious benefits for the trainee, but we also found supervisors experienced gains as well. For supervisors, the close relationship meant exposure to new knowledge and ways of practice.

> *They (trainees) bring things or different ways of doing things or different suggestions that you may not have considered or things that they've found elsewhere. So, it's a mutual kind of symbiotic relationship. S1*

The 'apprenticeship' working arrangement was an enabler to the supervisory relationship because of the role modelling that could occur. Trainees spoke about observing and emulating positive traits of their supervisors.

> *There's people that you just idealize and you're like, I want to be like them and you just, like go home and write down exactly how they said something and exactly what they did. T6*

Although not all supervisors recognised that role modelling was occurring, those that did remarked on the great responsibility that it brought.

> *I think our trainees assume our personalities and quirks as well. They don't just pick up the knowledge and the skills they also pick up the attitudes and the bad habits. You have to be, it's like having a child, you have to be so careful what you say because they just soak it up, it's like a sponge. S7*

Workplace practices

Structures and practices within the workplace affected the supervisory relationship. Some were barriers, some were enablers.

The major barriers to development of the supervisory relationship were related to the lack of continuity of exposure, and the unpredictable demands of the clinical environment. Lack of continuity of exposure prevented the formation of deeper connections between individuals.

> *Last year, I'll say for the whole year I probably work with less than half the trainees and each of them probably not more than twice. You know them but you don't really know them. S2*

Unpredictable clinical demands sometimes took priority over planned educational episodes.

> *Often when you make plans, they get interrupted by the clinical flow of the day, and it's difficult to give the trainee the quality they actually deserve. S1*

Practice variation was a confusing aspect of anaesthetic culture to very junior trainees.

> *I do also think at the start when you're learning, having so many different ways of doing things can be a hindrance, because you're just wanting to learn the basics. T8*

As trainees progressed, they came to have a more nuanced view of variation. Supervisors were very positive about it because of the learning opportunities presented by exposure to a variety of modes of practice.

> *I think particularly in a big center like ours, they work with so many consultants and see so many different ways to skin the cat. And that teaches them that, you know, because occasionally you have to pull a rabbit out of a hat. So, it teaches them a different skill set by working in such a large group. And I think that's very beneficial. S6*

Education being valued

It was evident that the workplace culture valued training and education. This was the basis of many positive experiences for both trainees and supervisors.

Compared to anything else I've ever done, (in) anaesthetics the supervision, and teaching and learning is so much better than any other specialty that I've worked in. T3

Feedback was a frustrating aspect of workplace culture for many trainees. They described looking for feedback, or short of that, an acknowledgement of their contributions, and not receiving it.

And you don't get feedback unless you really request it. And that makes it really kind of like disheartening. I remember so many times (when) you're training, it's like, how, like, what am I doing? Like, I come to work, and I really work my ass off. And I try and do the best job that I can do. But I don't even know like, is that valued? Is it? Like, is it good? Or is it not? ... so three times throughout our training, we get a multi-source feedback, where we ask a range of people for feedback, and they give you stuff and then you're like, oh, this is what people think of me. T6

It is possible that there is a mismatch between what trainees and supervisors perceive as feedback. Trainees want formal feedback at the end of a session whereas supervisors feel they are giving feedback because of frequent coaching style feedback given during the performance of procedures.

I probably should step back, the feedback that you get with procedures that we do is often quite good [...] I think that the thing that we probably don't get as much feedback on is particularly when we've conducted a whole anaesthetic or something, not a discrete procedure. T5

Gender

Female trainees noted that gender could influence their training experiences; this observation was echoed by some female supervisors.

The impact of gender followed two broad patterns. The first was through experiences that led female trainees to identify an undercurrent of misogyny pervading medical culture.

Look, I'm just going to say it outright as a female, especially if you're working with a tall confident gentleman that has never struggled a day in their life or never had to fight any kind of oppression whatsoever, they will automatically judge you as being inferior. T7

The other was in the way male trainees managed the image they presented to their supervisors; this was the strongest gender-based difference. Female participants reported male trainees presenting themselves as more experienced than a female trainee of the same level with potential downstream impacts upon access to training opportunities.

The other thing I did want to mention is that the boys in training are more confident. T1

(Speaking about male trainees:) Yes, I think, which is not an uncommon thing. I think their level of confidence is incongruent with their level of experience. S10

The males tend to be a lot more forthcoming and a lot more .... more confident in their abilities. Yeah, whereas I definitely think females are less so. T8

Discussion

We found the supervisory relationship in anaesthesia to be complex and nuanced. The success or otherwise of the relationship has profound implications for trainee learning and satisfaction. It was remarkable how successful most of our study participants found their supervisory relationships, despite working with one another infrequently, and the often-busy high stakes clinical environment in which the supervision was practised. But there was room for improvement. In this discussion we offer reflections on our findings, and offer suggestions for trainees, supervisors, and departmental leaders to optimise clinical supervision in anaesthesia.

Tensions in the supervisory relationship

Central to our findings was an obvious tension. Trainees need to be extended beyond their comfort zone – in the service of learning – and supervisors need to remain 'in charge' – in the service of patient safety. This tension can be navigated, through an effective sizing-up process and through negotiation of autonomy, but this was variably performed in our study.

Trainees and supervisors have different motivations for sizing each other up. The trainee is looking to maximise their learning opportunities whereas the supervisor seeks to understand the level of patient care that can be safely delegated to the trainee. Trainees approach this negotiation more cautiously because of the inequity of power inherent in trainee–supervisor relations.[1,17] If a trainee perceives a supervisor as using their power for the trainee's benefit to help them learn, this can have significant positive effects on the negotiation of the learning experience. Conversely, if a trainee does not trust the supervisor to act in their best interests they will seek to 'survive' rather than to learn from the clinical experiences on offer.[17]

Based on guidance for other high stakes communication,[18,19] it may be that the tension needs to be made explicit, allowing supervisors and trainees to navigate the tension with a clearer understanding of the other's position.

The zone of proximal development

Especially beneficial for learning are clinical tasks at the edge of the trainee's comfort zone. In educational terminology this is known as the 'zone of proximal development' (ZPD)[20,21] and is the distance between the learner's level of independent problem solving and their problem solving with expert guidance. Allowing trainees supervised autonomous practice, whilst supporting them by giving appropriate feedback, instruction, and oversight has been identified as the most important quality of an effective supervisor.[1] Learners who are supported to become more autonomous by their supervisors are more likely to feel competent and develop meaningful autonomous practice themselves.[22] Supervisors can utilise the ZPD concept to support trainees to take on aspects of clinical care that are of greater complexity than the trainee would be able to achieve on their own.[21]

Role modelling

Role modelling was a powerful influence on the trainees in our study, consistent with other literature.[23,24] For supervisors, this means they are educating all the time whether they are teaching or not. Role modelling is often unplanned and forms

part of a wider phenomenon known as the 'hidden curriculum', encompassing the informal, unofficial, and often undeclared processes which function at the level of organisational or group culture, which trainees internalise as part of becoming a member of a profession.[24–26] It can contribute as much to the learner's development as the official curriculum.[24]

Feedback

In our study, trainees reported that they did not receive enough feedback, an issue supervisors seemed unaware of. This mismatch in faculty perceptions and student expectations is widely reported across learning contexts.[27] This is of concern because much of the knowledge and skill acquisition in anaesthesia occurs through experiential learning and reflective practice in the operating theatre.[26] Feedback is an essential part of enabling the learner to develop and improve their practice,[26] but may need to be explicitly signposted to learners.[28]

Gender

We found that female participants reported their gender impacted upon their training experiences. Specifically, the way in which male trainees present themselves to their supervisors may result in the males being perceived as more experienced than their female colleagues with downstream effects on opportunities to undertake procedural work. Our finding is consistent with emerging literature in anaesthesia and other procedural specialities[29–31] which shows female trainees perform fewer procedures and feel less prepared for independent practice than their male counterparts.

In the UK, the existence of systemic biases has been identified as one of the reasons that the proportion of female specialists (37% in 2019) is significantly less than the proportion of female medical graduates (>50% since 1991).[32–34] A similar gender imbalance exists in Australia with 32% of anaesthetists being female in 2017.[35] These numbers may indicate the existence of similar systemic biases within Australasian anaesthesia training which either discourage female medical graduates from entering or prevent them from completing anaesthetic training. Our findings indicate one possible mechanism is a perceived confidence gap that leads to male trainees being offered greater access to procedural learning opportunities.

Recommendations for practice

We expect our findings will resonate with the experience of anaesthesia supervisors and trainees but suggest that our study offers more than merely validating lived experience. We offer the following practical tips for trainees, supervisors, and departmental leaders.

What to take away if you are a trainee

1. Be explicit about your 'ZPD' and help supervisors in their sizing up process. Alleviate supervisor anxiety by articulating your understanding of the limits and tensions in autonomous practice.
2. Utilise in-training formative assessment processes (structured learning events [SLEs], UK, workplace-based assessments [WBAs], Australia/New Zealand) to signal your willingness to learn and to take on responsibility.
3. Explore role-modelling behaviour when you can – ask supervisors why they are practising a certain way.

What to take away if you are a supervisor

1. Be explicit about your sizing up process with trainees, and transparent about the judgements you are making in deciding on the level of autonomy to allow.
2. Signpost when feedback is being given. Actively make note of one or two points during the working day to use as the basis of a feedback conversation with your trainee.
3. Take the initiative in providing feedback and help trainees to feel empowered to ask for feedback.
4. Reflect on personal biases (gender, hierarchy, etc.) and recognise these may impact much more on trainees than you realise.

What to take away if you are in educational/departmental leadership

1. Re-evaluate rostering practices, to promote some continuity of exposure between trainees and supervisors, especially for junior learners.
2. Consider explicit supervisor training and peer discussions for consultants at the departmental level. Training organisations such as the RCoA and ANZCA may be able to play a role in making such courses widely available to any fellows or senior trainees supervising trainees.
3. Promote a feedback culture. Initiatives such as 'WBA Wednesday' (personal communication) within an anaesthetic department can help normalise the giving and receiving of feedback.

Limitations and future avenues of research

We recognise that our study reflects the experiences of only one training location, meaning it could be reflective of local institutional culture, which potentially limits the generalisability of the findings. Further exploration of the supervisory relationship in other locations, especially regional and remote situations would create a broader, more nuanced understanding of the topic.

Another potential limitation is the possibility of selection bias stemming from the voluntary nature of participation. Volunteers may be more naturally interested in the educational process which could affect the way they answer questions and view their experiences.

Although this exploratory study was not specifically seeking to be representative in terms of gender, the volunteers were predominantly female especially in the trainee group. This could potentially mean that much of the reported trainee experience is from the female perspective. We recognise that a male trainee cohort may have resulted in themes with different emphases.

Despite the steps taken to mitigate it, the position of the lead researcher as supervisor of training may also have affected the way trainee participants answered the questions.

Conclusion

Anaesthetic training provides a unique context in which to explore the close trainee–supervisor relationship. This study identified six themes which contributed to the formation and growth of the relationship. We combined the themes into a conceptual model which illustrates how diverse elements such as a sizing up process or cultural factors such as role modelling are interconnected and all contribute to creating a strong foundation to the relationship. Relationships that are built upon this foundation enable trainees to engage in

negotiated or supported autonomy, albeit constrained by important factors such as patient safety, limited feedback, and differential gender experiences. Our findings may support supervisory relationships to reach this ideal more effectively.

Authors' contributions

Study concept: TH
Research protocol and ethics application: all authors
Interview of supervisor participants: TH, VB
Thematic analysis of data: all authors
Preparation of drafts of reports: TH, EP
Co-author of final report: all authors
Recruitment of participants: VB, EP
Interview of trainee participants: VB, EP

Declaration of interest

TH holds positions as an ANZCA supervisor of training and Staff Specialist Anaesthetist at Gold Coast Hospital and Health service (GCHHS) and as a discipline lead in Anaesthetics at the Faculty of Health Sciences and Medicine, Bond University.

VB holds positions as professor of Emergency Medicine, Faculty of Health Sciences and Medicine Bond University, and a Staff Specialist Emergency Physician at GCHHS. She is director of the Bond Translational Simulation Collaborative, which provides consultancy services in the field of education and simulation.

EP holds positions as a Staff Specialist Emergency Physician at GCHHS and research assistant at Bond University.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.bjao.2023.100137.

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Appendix 1. Interview guide

These questions are designed as a guide and should not prevent interesting topics and responses from being followed up as they occur during the interview process. They are not designed to be prescriptive.

Interview guide: trainees

- Icebreaker/opener: Tell me a bit about yourself and how you came to be an anaesthetic trainee?
- Tell us about a time when you feel like working with a consultant went well? Why? What made it good? What were the consequences?
- Can you tell us about a time that went not so well?
- What do you really like about working in a team with a consultant?
- What are the challenges of working with a consultant?
  - Prompts
    - Anaesthetic training typically involves an' apprenticeship' style approach where specialists and trainees work together for a clinical session. What are the advantages of this approach?
    - Conversely what are the disadvantages of the apprenticeship style approach in anaesthetic training?
- How do you get to know the consultant you are working with?
- How is trust established?
- How do you go about negotiating your learning experience with the consultant you are working with? How do you negotiate feedback?
  - Prompt: how do you make sure you get the learning opportunity or the experience that you require?
- How would you define good clinical supervision in anaesthetics?
- Can you give me an example?
- How do patient safety concerns affect your learning?
- What does your ideal day with a consultant look like from your perspective?
- Consultants can serve as role models for trainees. What do you think?
- What do you like about working with a variety of consultants?
- Is there anything else you'd like to add about working with a consultant?

Interview guide: supervisors

- Icebreaker/opener: Tell me a bit about yourself and your career in anaesthetics.
  - Prompts: How long have you been working in anaesthetics for? What do you like about it?
- What do you like about working with trainees?
- Can you think of a time when working in a team with a trainee went really well? Why? What made it good? What are the consequences?
- Tell me about a time when it didn't go so well.
- What challenges do you face when working with a trainee?
- What are your thoughts about working with a variety of trainees (i.e. a different person each day)?
- How do you get to know the trainee you are working with?
  - Prompt: How is trust established? How do you feedback to the trainee?
- Anaesthetic training typically involves an' apprenticeship' style approach where specialists and trainees work together for a clinical session. What are the advantages of this approach? (Is this a good/acceptable approach?)
- Conversely what are the disadvantages of the apprenticeship style approach in anaesthetic training?
- Tell me about how you plan your supervision when you work with a trainee.
  - Prompts: Do you plan learning or are you more of an opportunistic teacher? Why/Explain?
- What sorts of things do trainees tell you they want to focus on or achieve during a clinical session?
- How do you and the trainee negotiate their learning experiences?
- How do patient safety concerns affect your teaching/ supervision?
- How would you define good clinical supervision in anaesthetics?
  - Can you give me an example?

- What are the qualities of an ideal supervisor?
- What does your ideal day with a trainee look like?
- How do you modify your supervision or teaching depending upon the trainee's level of experience/ seniority?
- How does your knowledge of the trainee influence your teaching?
- Do you think this has an effect on their learning?
- Consultants are role models for trainees. What do you think about this idea?
- Are you conscious of being a role model when you work with a trainee? How does this affect your behaviour?
- Is there anything else you'd like to add about working with a trainee?

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