Waring, Lorelei, Miller, Paul K. ORCID: https://orcid.org/0000-0002-5611-1354 , Sloane, Charles ORCID: https://orcid.org/0000-0001-5343-7626 and Bolton, Gareth ORCID: https://orcid.org/0000-0002-5453-4257 (2017) Constructing the "ideal" first-post sonographer: mapping the views of ultrasound department leads in the UK. In: UK Radiological Congress, 12-14 June 2017, Manchester, UK. (Unpublished)

Constructing the "Ideal" First-Post Sonographer: Mapping the views of Ultrasound Department leads in the UK

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- There are no potential conflicts of interest or relevant relationships to report.

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Background

- Current chronic lack of sonographers in the UK healthcare services (Society and College of radiographers, 2014),
- DEUS Postgraduate course University of Cumbria 2016
- Original HENW study investigated in-depth interviews with Ultrasound Department Leads throughout the North West of England.

- Research evaluated participants' views on the best course(s) of prospective action in relation to:
  - future workforce development strategies;
  - proposed sonographic education models.

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Design

- An opportunity sample of participants (N=20) was recruited from Merseyside, Greater Manchester, Lancashire and Cumbria, working both within NHS Trusts (N=17) and independent providers (N=3).

- Interviews were semi-structured, conducted and recorded by telephone and transcribed verbatim. Key identifiers were removed to preserve participant anonymity. Mean interview length was 25 minutes.

- A Straussian Grounded Theory approach (Strauss & Corbin, 1998) was used to investigate qualitative contributions, allowing for the accommodation of both range and depth in the data: **Inductive Approach.**

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"Ideal" Identities

- Following their evaluations of the prospective educational models, participants were finally asked to outline the defining attributes of their "ideal" first-post sonographer.

- Expectation of repeated and consistent official lines on "Essential" and "Desirable" characteristics in role specs.

- Findings indicated something different, more closely related to evidence arising from current social psychological literature on Talent Identification (henceforth **TI**; Miller, Cronin & Baker, 2015).

'A fairly key facet is being able to cope with the academic requirements'

'Communication is the most important thing'

'The ability to work autonomously'

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Sorting Attributes

- When describing the ideal attributes that they would look for in a new sonographer, participants largely sorted them (implicitly and explicitly) into:

  1. The **Innate** (i.e. core properties of a person), and;

  2. The **Malleable** (i.e. skills that could be developed).

'You have to be able to talk to people'

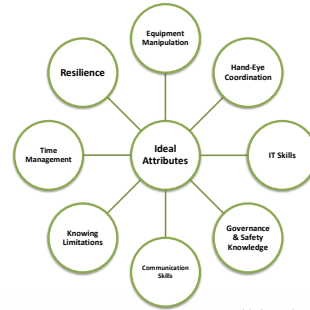*'The ability to prioritise a workload'*

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Trends

- **Technical** attributes (i.e. specifically sonographic proficiencies) were generally taken to be highly malleable; they had been trained and could be trained further.

  'Manipulation of the machine should be a priority'

- **Personal** attributes (i.e. nominally psychological traits and baseline social skills) were generally taken to be rather less malleable than technical attributes, and often innate.

  'Its important that it's a caring person'

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"Technical" Smörgåsbord!

Equipment Manipulation · Hand-Eye Coordination · IT Skills · Governance & Safety Knowledge · Communication Skills · Knowing Limitations · Time Management · Resilience · **Ideal Attributes**

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"Personal" Smörgåsbord!

Academic Ability · Empathy · Perfectionism/ Drive · Communication Skills · Knowing Limitations · Teamwork · Autonomy · Resilience · Hand-Eye Coordination · **Ideal Attributes**

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BUT!

- There was some overlap between how technical and personal skills were defined.
  - E.g. Communication skills, resilience, hand-eye coordination and capacity to understand personal limitations were variably framed as technical or personal attributes, or both.

- There was also considerable variability in interpretation around the malleability of personal attributes such as resilience, academic capacity, empathy, drive, communication and teamwork.

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Even the Psychobiological..?

- Strong hand-eye coordination as <u>innate</u>:
  - *"**Good** hand-eye coordination, they've got to have that dexterity to actually physically scan."*

- Strong hand-eye coordination as <u>malleable</u>:
  - *"There is a requirement for **basic** hand-eye coordination, which will be built on in any department."*

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Thus Far…

- Participants did not always agree upon what constituted the desirable technical and/or personal attributes of a new sonographer.

- Participants did not always agree on which attributes were innate and/or malleable within a new sonographer.

- Participants did not always agree on whether the more malleable attributes of a new sonographer could be actively developed, or should be passively allowed to develop.

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Personal Experience

Clear implications for candidate-selection

University of Cumbria 3 stage selection process:-

- Academic,

- interpersonal/communication,

- hand eye coordination/spatial awareness,

- knowledge of Ultrasound,

'Someone who is responsible enough to pick up the reporting challenges we face'

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But ………

- Psychological work on TI indicates that no matter what the formal selection processes might be…

  – "…no set of directives can [ever] be specified to cover all empirical contingencies (Garfinkel, 1967). As such, even if a prescribed model is nominally being utilised to-the-letter, there always remains some degree of situated (and thus experiential) interpretation involved in any involved decision." (Miller, Cronin & Baker, 2015, p.646)

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Manifesto Point

- So, we might propose, that some of the inconsistent opinions of employers with inconsistent first-post sonographers **inevitably gives rise** to inconsistent ways of interpreting and valuing their attributes.

- Ultrasound training programmes are challenging and there are many facets to consider when designing a curriculum or developing a selection process

  – Our business is to address any inconsistency within the educational domain.

'Have the patient at the forefront of everything you do'

'Giving bad news, I think that should be a really big focus'

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Summary

- There are varying opinions of the ideal attributes of a first post sonographer

- Some attributes are unanimously seen as essential but there are differing opinions on whether these are 'trainable'

- To invoke more consistent standards, we need to produce more consistent sonographers.

- Can the initial selection process and curriculum help with this?

'I think the biggest thing is someone who wants a career in Ultrasound'

I'm looking for someone who is training because they want to do this job'

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References

- Garfinkel, H. (1967). Studies in Ethnomethodology. NJ: Prentice Hall.

- Miller, P.K., Cronin, C. and Baker, G. (2015) 'Nurture, nature and some very dubious social skills: an interpretative phenomenological analysis of talent identification practices in elite English youth soccer', *Qualitative Research in Sport, Exercise and Health,* 7(5), pp. 642-662.

- SCOR (2014) 'Sonographer workforce survey analysis'. https:www.sor.org

- Strauss, A., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). London: Sage.

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