

Research Confidence of Critical Care Nurses:



A Mixed Methods Preliminary Study

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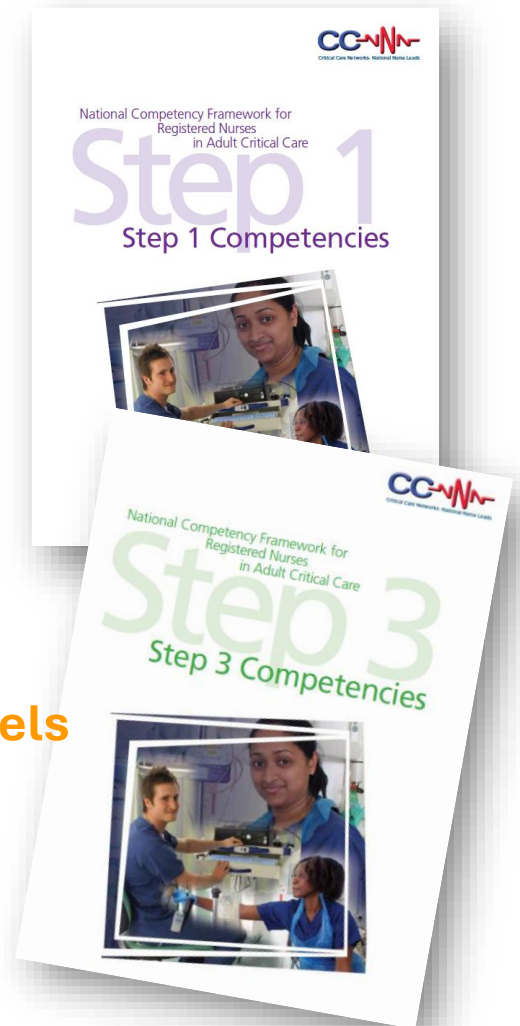
Background

- **Research competencies** are critical components to enable and empower nurses to engage with research and the wider evidence-based practice paradigm in informing clinical practice.¹⁻³
- **Specialist postgraduate courses** provide opportunities to develop research competencies specific to certain patient cohorts or clinical situations.⁴⁻⁵
- **Research engagement** in critical care for staff nurses is facilitated by locally (i.e., Trust-specific) and nationally designed programmes.⁶



Background

- In the UK, staff nurses working in intensive care are provided spaces to develop their research competencies as applied to the critical care environment via the **specialist and standardised National Competency Framework for Registered Nurses in Adult Critical Care**.⁷
- However, research shows that nurses report **low levels of engagement with research activities** despite supposedly attaining research competencies post-completion of such programmes.⁸⁻⁹



Aim

- 1. Measure the level of confidence of critical care nurses in conducting research activities;**
- 2. Compare the level of confidence of critical care nurses post-Step 1 and post-Step 3 courses;**
- 3. Examine nurses' perspectives on factors that act as barriers and facilitators of developing research competencies.**



Methods

Quantitative

Survey questionnaire

Part 1: Sociodemographic characteristics

Part 2: 5-point Likert scale to rate confidence in research-related skills

Qualitative

Focus Group Discussion



Results

Post-Step 1 → **n = 48**

Post-Step 3 → **n = 53**



Post-Step 1 Nurses

How many years have you been working in critical care?

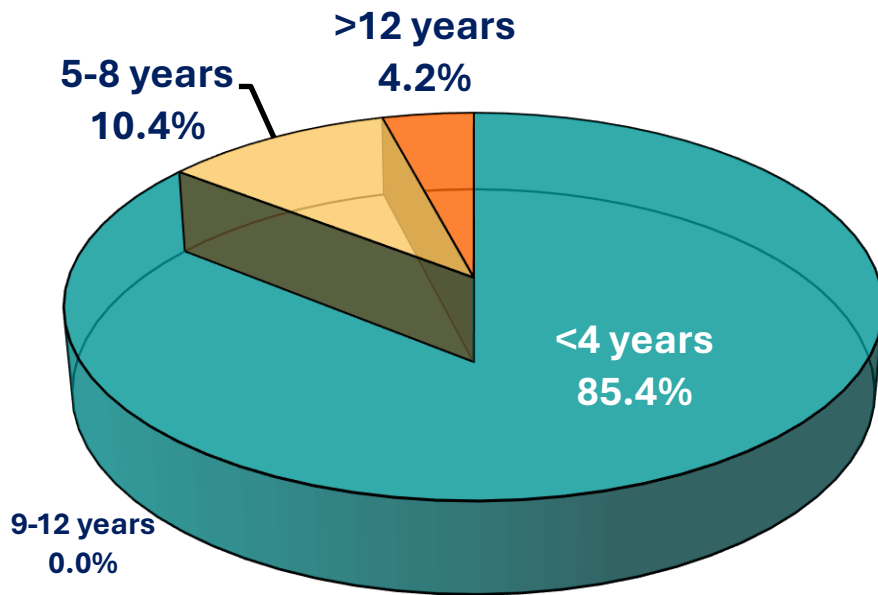


Figure 1. Post-Step 1 nurses' length of work experience in critical care

What is your highest educational attainment?

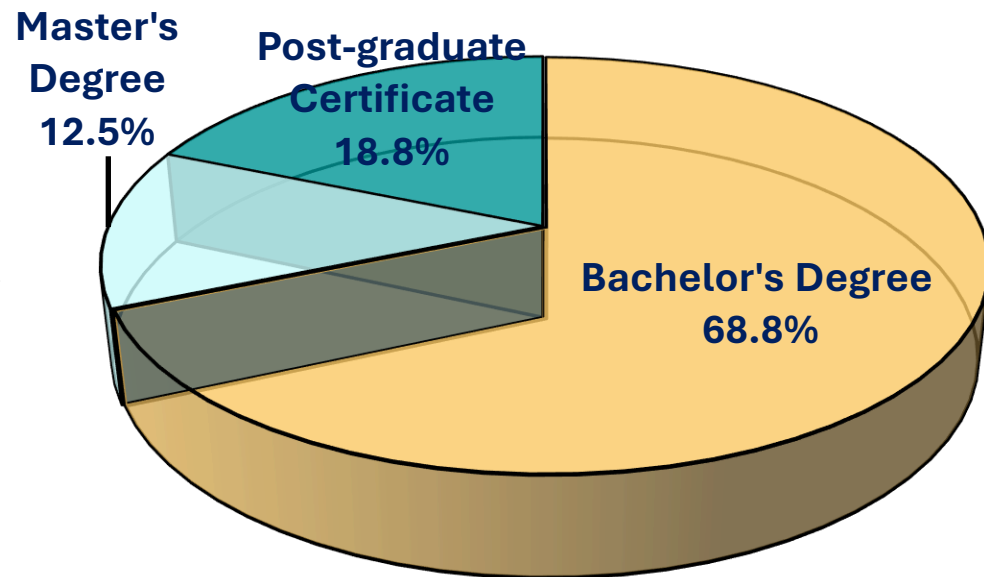


Figure 2. Post-Step 1 nurses' highest educational attainment

Post-Step 3 Nurses

What is your current job role/ position?

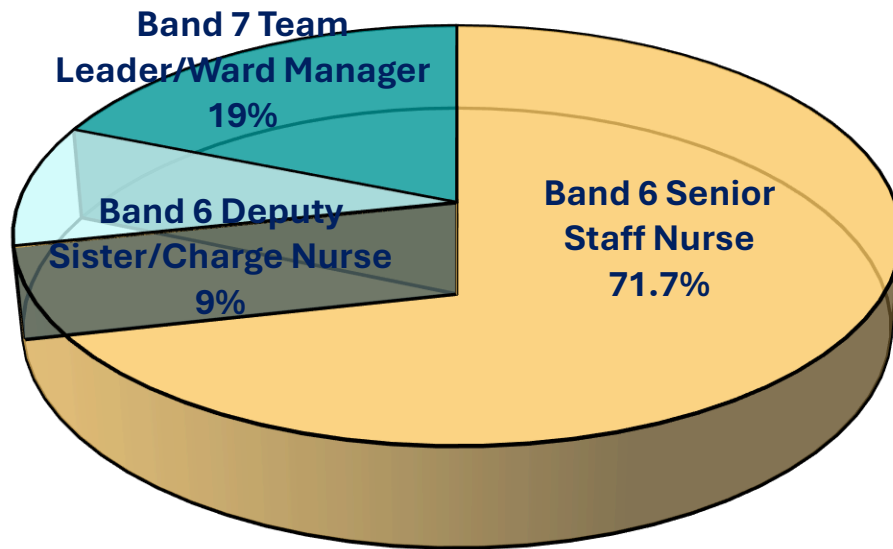


Figure 7. Post-Step 3 nurses' job role

What is your highest educational attainment?

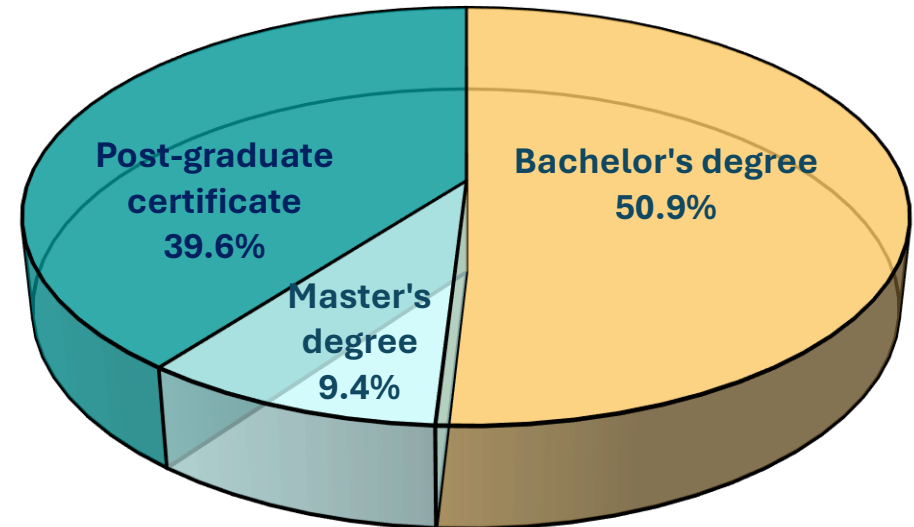


Figure 8. Post-Step 3 nurses' highest educational attainment

Post-Step 3 Nurses

How many years have you been working in critical care?

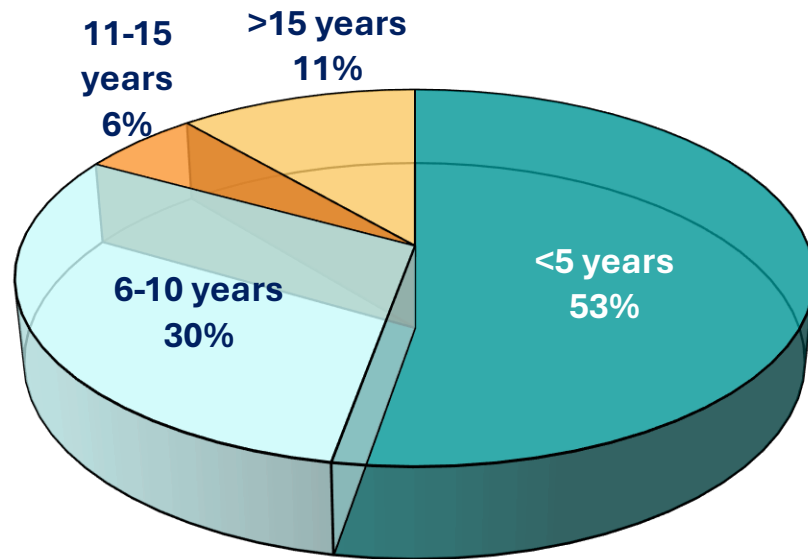


Figure 9. Post-Step 3 nurses' length of work experience in critical care

How long ago did you finish your ICU course?

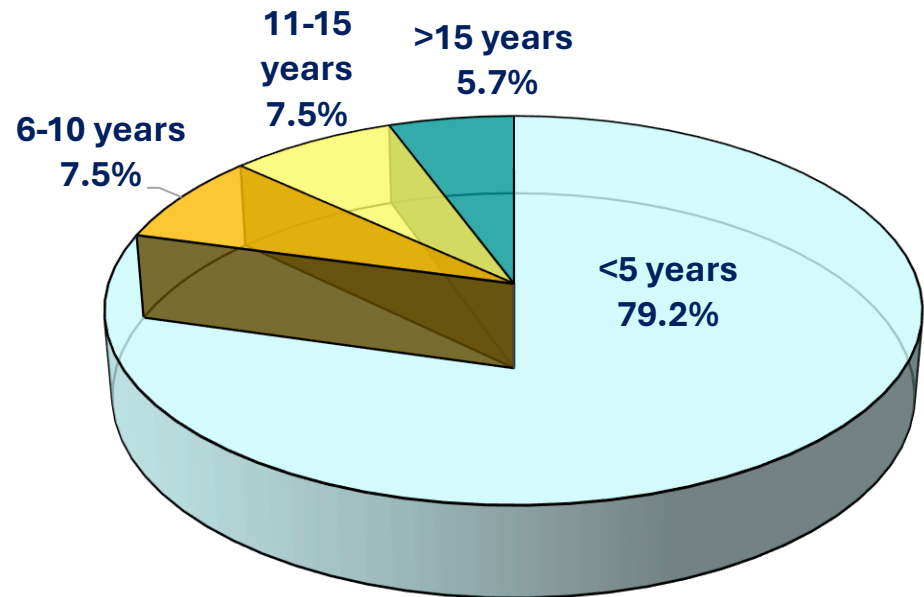


Figure 10. Length of time since finishing ICU course

Mean Confidence Scores in Research-Related Activities

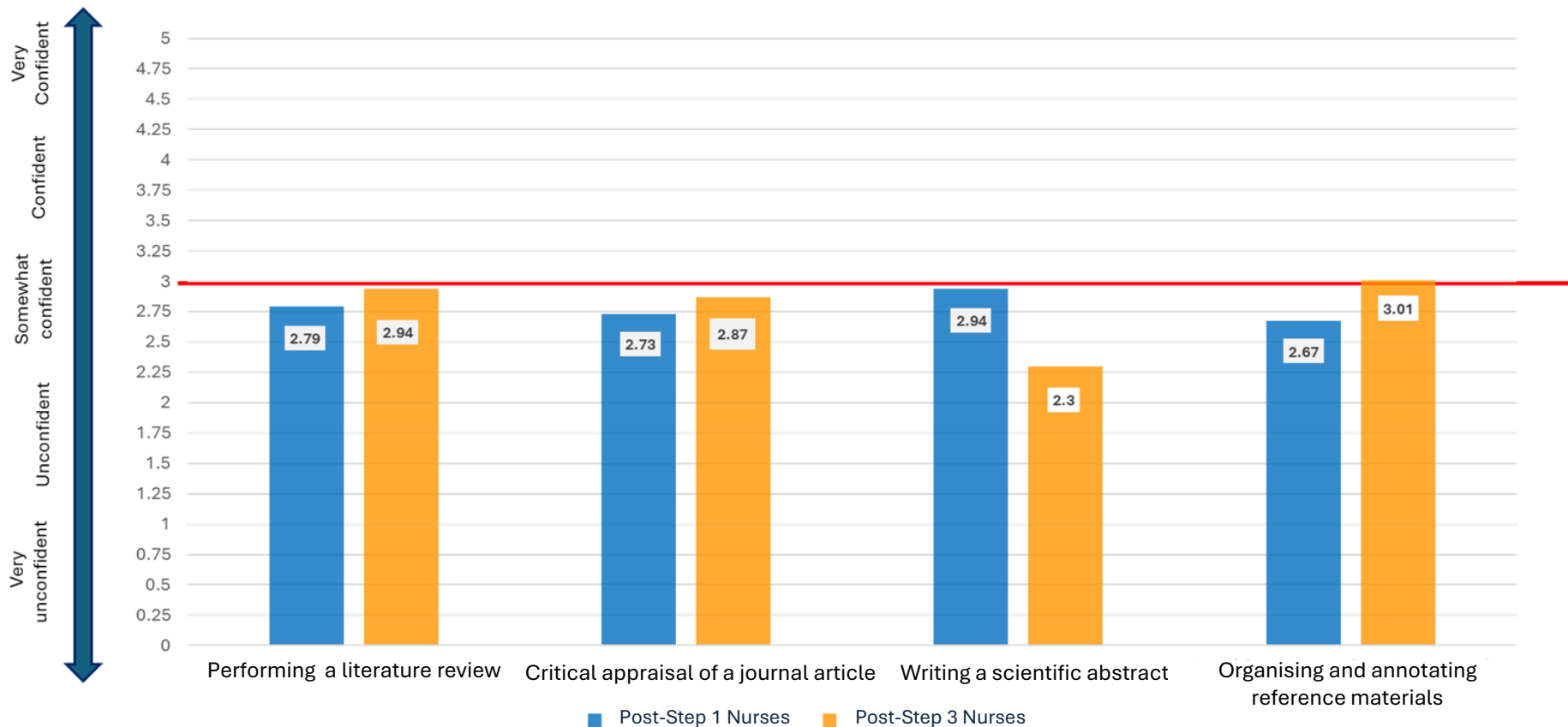


Figure 18. Mean confidence scores in research-related activities

Post-Step 3 Nurses

Rate your confidence in making a PowerPoint presentation:

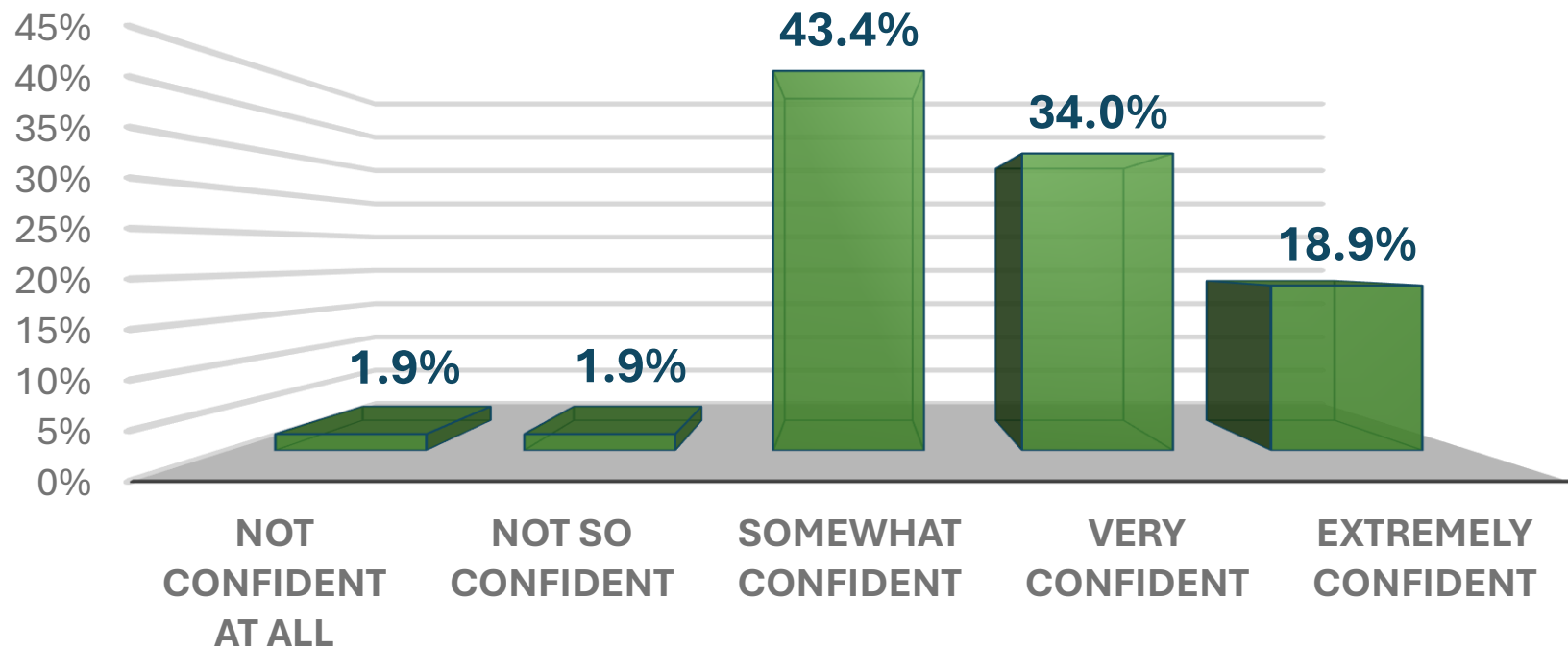


Figure 15. Post-Step 3 nurses' confidence in making a PowerPoint presentation

Post-Step 3 Nurses

Rate your confidence in oral presentation:

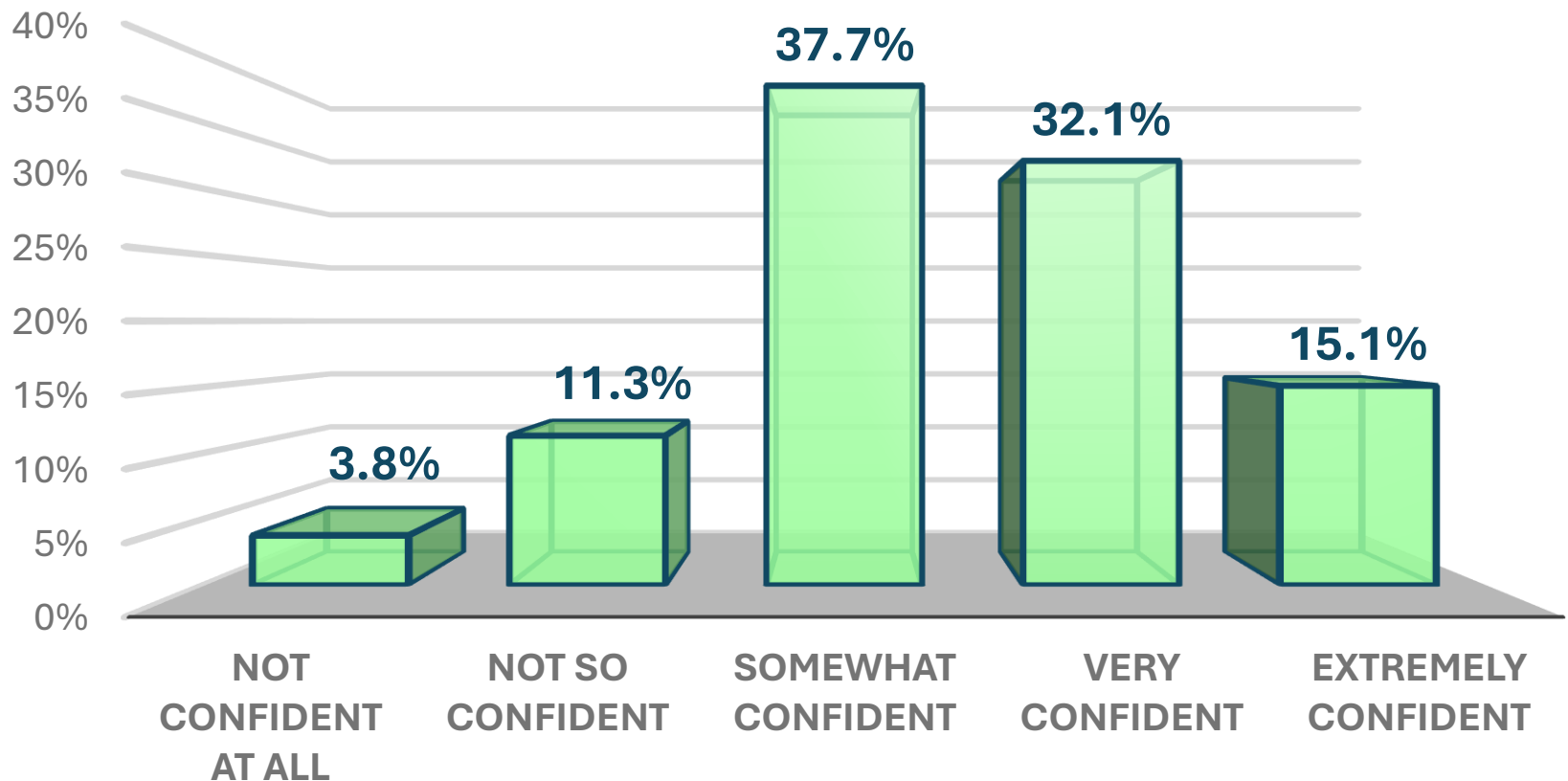


Figure 16. Post-Step 3 nurses' confidence in oral presentation

Post-Step 3 Nurses

Rate your confidence in academic poster presentation:

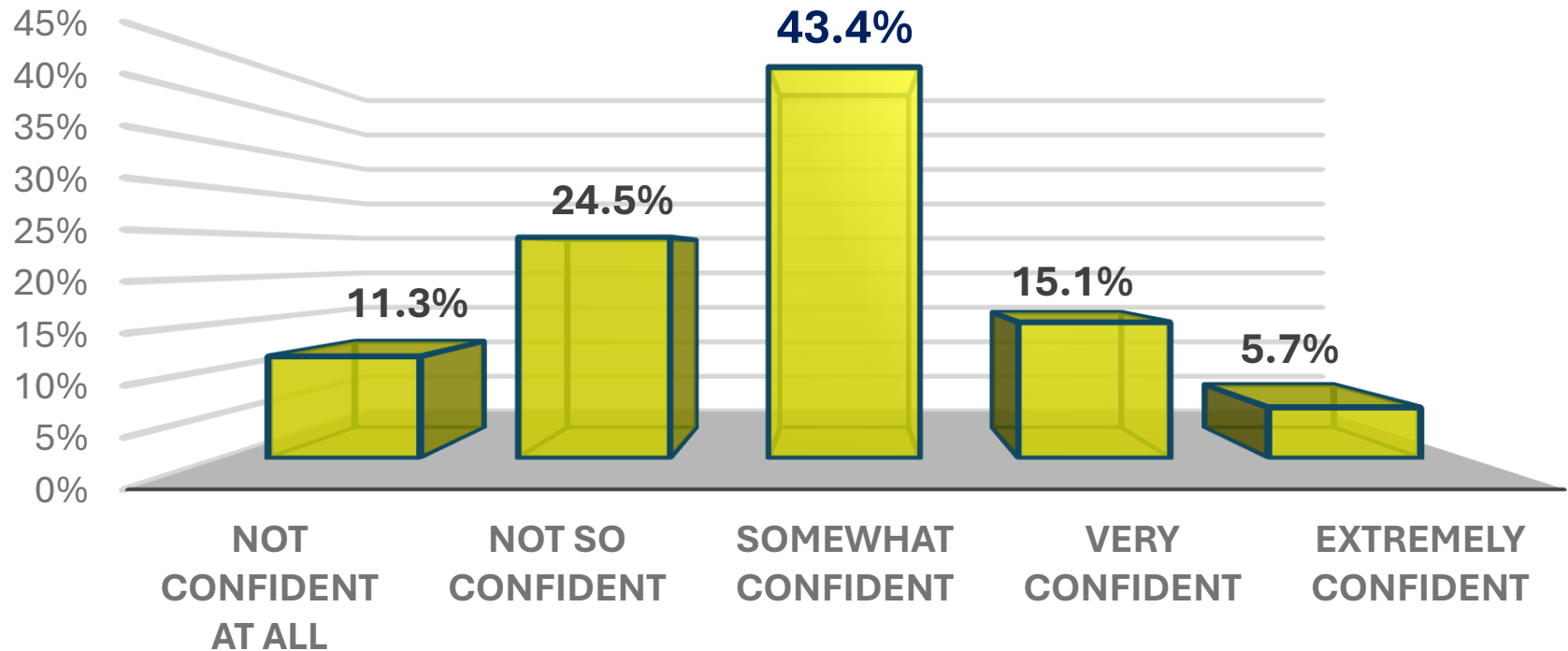


Figure 17. Post-Step 3 nurses' confidence in academic poster presentation

Inferential Statistics

- Among **Post-Step 1 nurses**, those who had a Master's degree compared to those who had a Bachelor's degree were significantly more confident in:
 - organising and annotating reference materials ($p < 0.05$)
 - performing a literature review ($p < 0.05$)
 - critical appraisal of a journal article ($p < 0.05$)



Inferential Statistics

- Post-Step 3 nurses had significantly higher scores compared to Post-Step 1 nurses on **literature review** and **critical appraisal** ($p < 0.05$).
- Post-Step 3 nurses had significantly higher **overall scores** on research confidence compared to Post-Step 1 nurses ($p < 0.05$).



Qualitative Analyses

Themes of Post-Step 1 Nurses' Focus Group Discussion

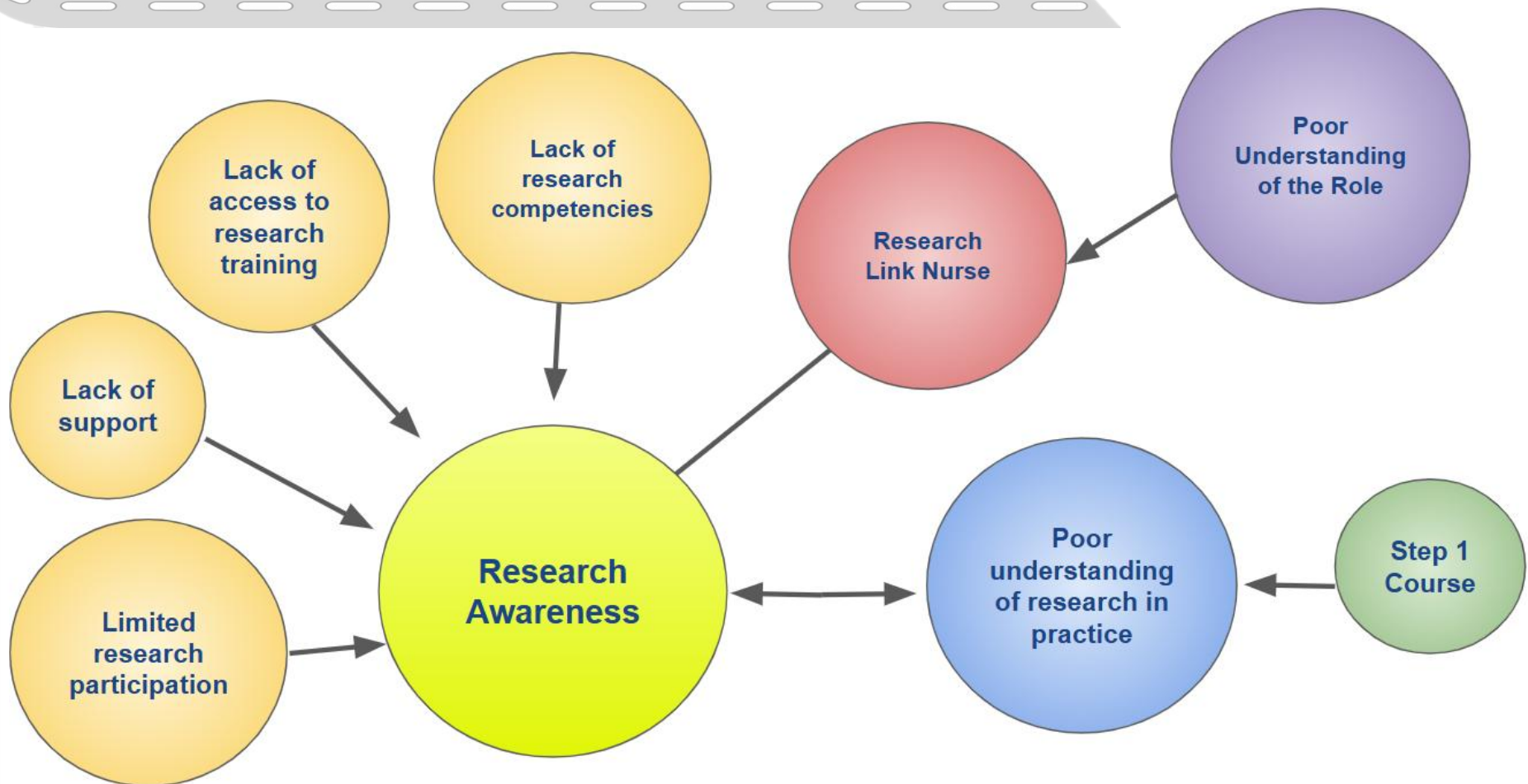


Figure 19. Themes of Post-Step 1 nurses' focus group discussion

Qualitative Analyses

Themes of Post-Step 3 Nurses' Focus Group Discussion

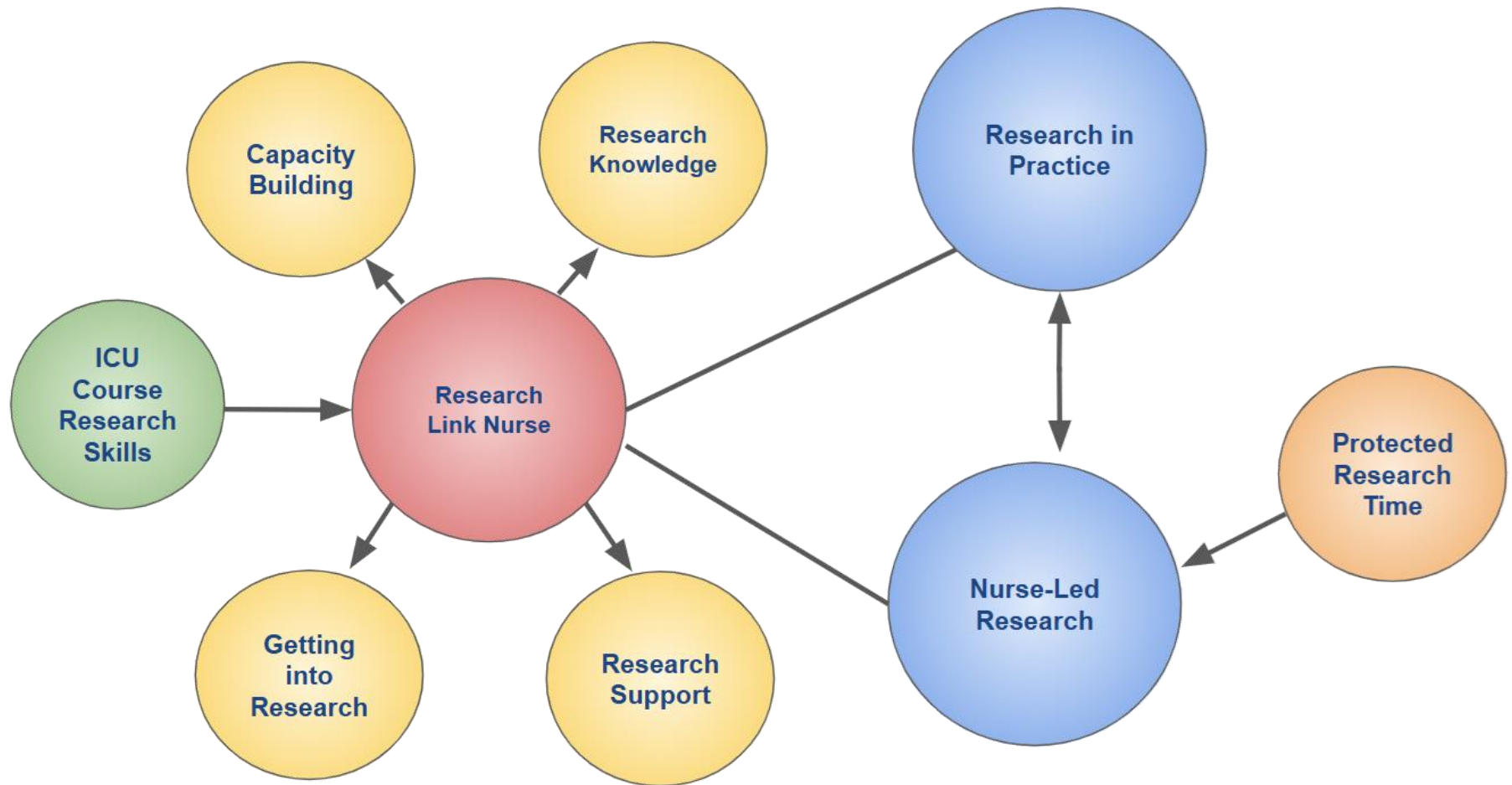


Figure 20. Themes of Post-Step 3 nurses' focus group discussion

Implications for Practice

- Healthcare organisations should **take steps to boost confidence in research**, involving the creation of the research link nurse role, and opening up avenues that nurses can utilise to get involved in research, and even to lead their own research projects.
- Nurses who feel confident in engaging and participating in research activities are ideally positioned to **maximize the benefits of research in clinical practice**, and to positively influence patient care and service delivery.



References

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**THANK
YOU!**