

Enhancing Stroke Rehabilitation Interdisciplinary Teams: Exploring Rehabilitation Nursing Practices and Perspectives

¹Tanlaka EF, ²McIntyre A, ³Connelly D, ⁴Snobelen N, ¹Haffar Y.

¹Faculty of Nursing, University of Windsor, Windsor, ON, Canada; ²Arthur Labatt Family School of Nursing, Western University, London, ON, Canada; ³School of Physical Therapy, Western University, London, ON, Canada; ⁴Independent Research Consultant, Mississauga, ON, Canada

Background

- In interdisciplinary stroke rehabilitation teams, little is known regarding how nurses perform their therapeutic roles or implement therapeutic techniques.
- A research gap exists in recognizing rehabilitation nurses as members of the interdisciplinary stroke rehabilitation team, with their therapeutic role minimized and undervalued as part of the formal rehabilitation process.

Research Questions

- What are the rehabilitation practices of Registered Practical Nurses (RPNs) and Registered Nurses (RNs)?
- How do the stroke rehabilitation nursing practices of RPNs and RNs compare to the internationally established rehabilitation nursing practices?

Methods

- **Design:** A cross-sectional study, using an Online survey, was employed to: (1) document the practices of RPNs and RNs in inpatient stroke rehabilitation units and (2) map their nursing rehabilitation practices to internationally established rehabilitation frameworks.
- **Inclusion Criteria:** (1) provide direct care to stroke patients admitted to inpatient rehabilitation units in Ontario, (2) hold registration in good standing as an RPN or RN in Ontario, (3) are employed part-time or full-time on an inpatient stroke rehabilitation unit; and (4) can read, write, and speak in English. **Exclusion Criteria:** Are "on leave" or work "casual" hours.
- **Statistical Analysis:** Descriptive statistics were performed for demographics and subscale items.
- ANOVA tested differences in responses by nursing designation, and correlation matrices showed relationships among items within individuals.
- Regression models assessed whether time as a rehabilitation nurse was associated with average subscale scores.

Funding

Results

Fig. 1 Differences in mean scores across rehabilitation practice domains by nursing designation

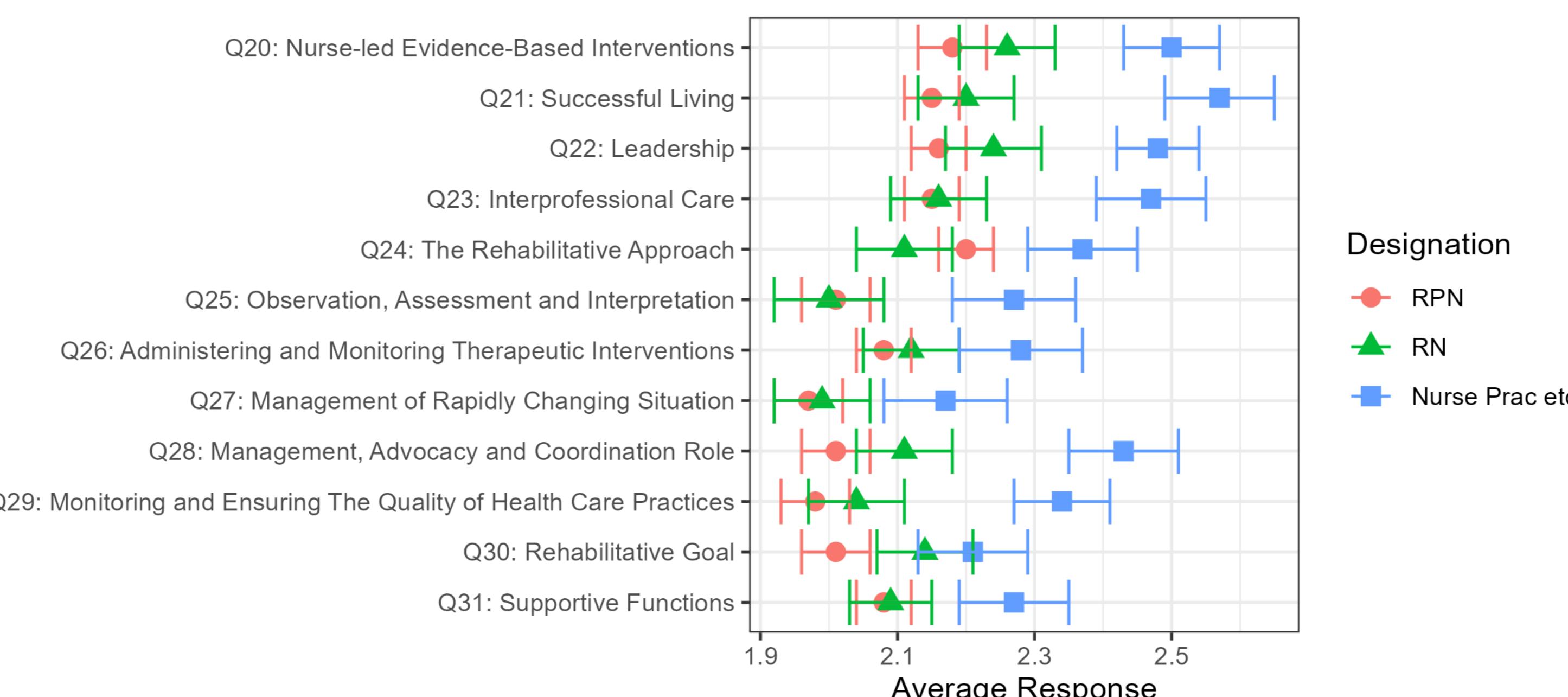


Fig. 2 Comparison of mean composite scores on each scale by nursing designation level

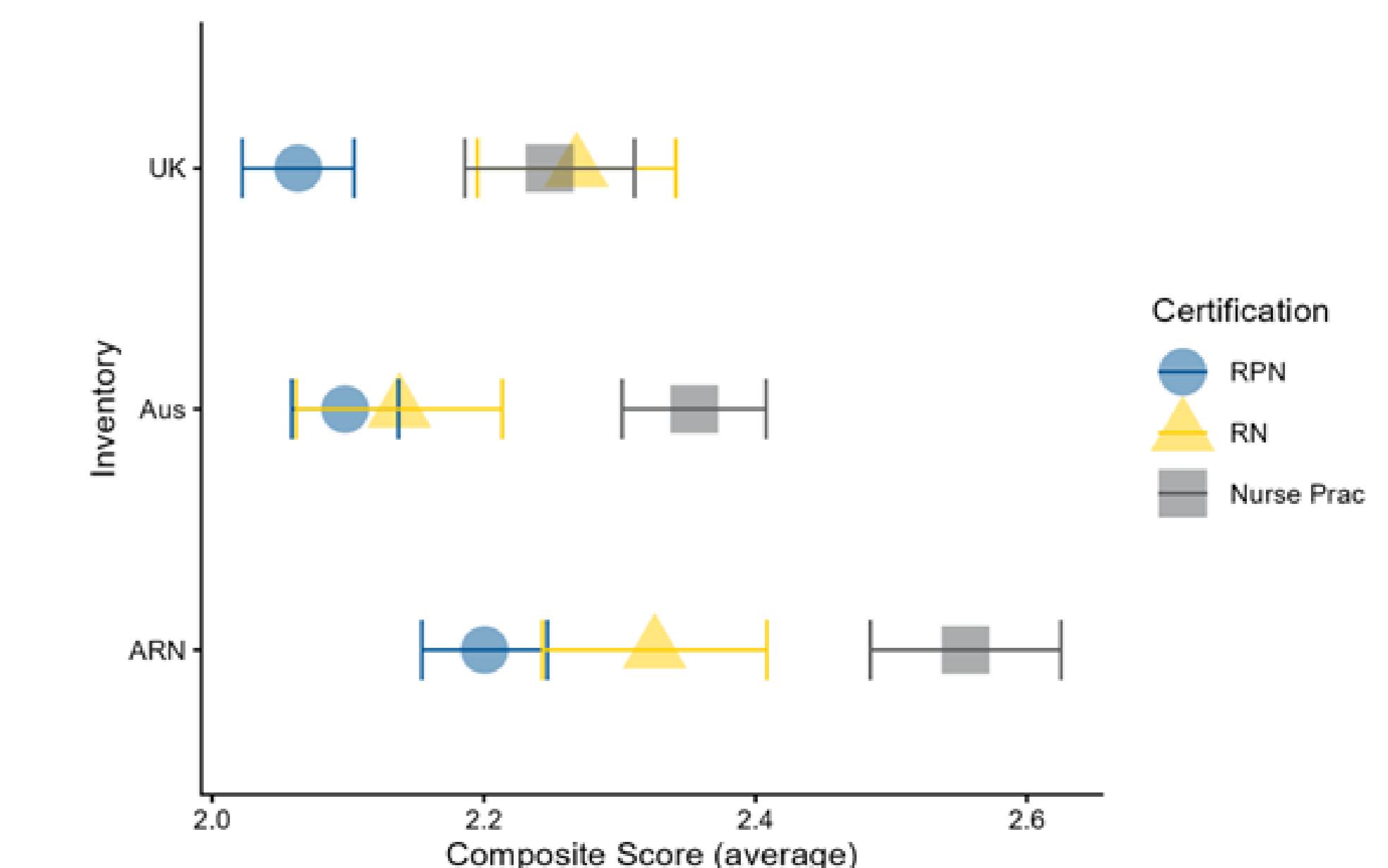
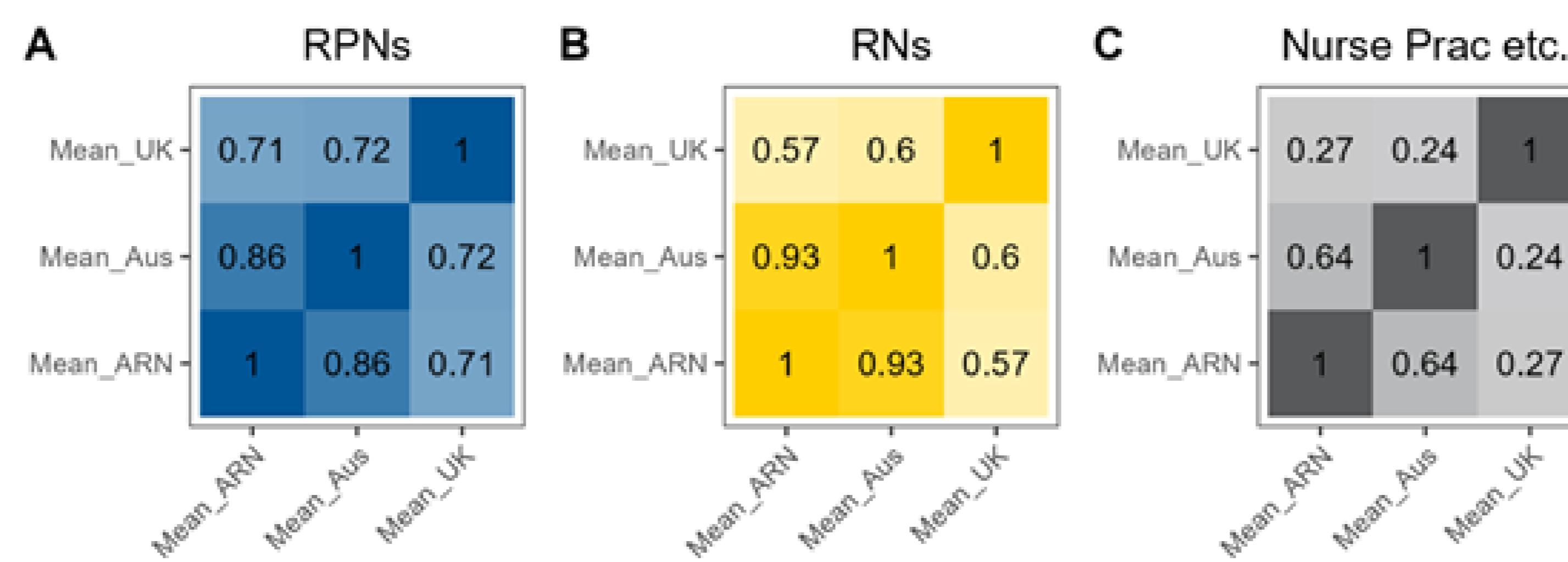
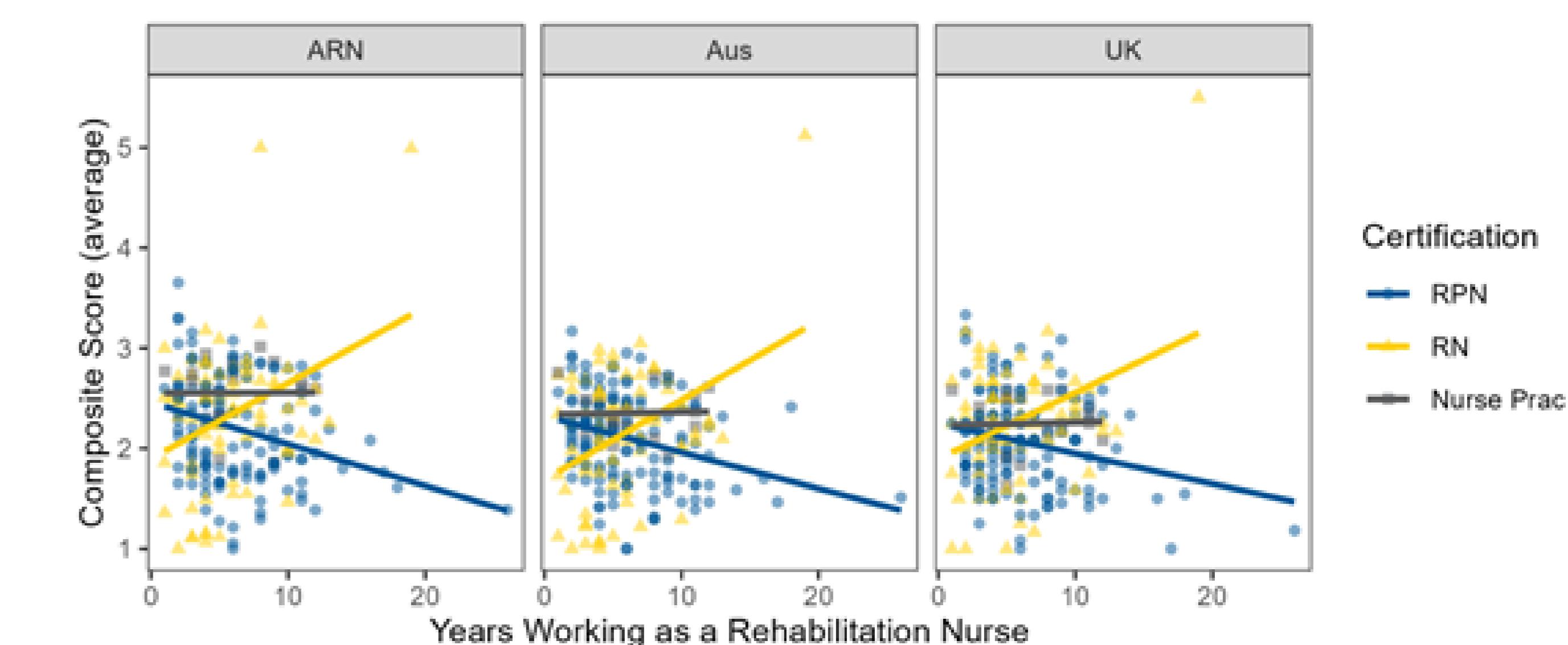


Fig. 3 Assessing consistency of patterns in nurses' engagement in care-related tasks across the three competency frameworks



- **Sample:** 224 nurses
RPNs (n = 134), RNs (n = 75), and NP/CNS (n = 20)
- **Years of experience as rehabilitation nurse:**
Less than 5 years (n = 92), 5-10 years (n = 99), 10-15 years (n = 33), and over 15 years (n = 5).
- Responses from RPNs and RNs were similar across the 12 subscales, but NPs reported significantly ($p = 0.001$) higher values than RPNs and RNs on Successful Living and Interprofessional Care, and additionally scored higher than RPNs on Leadership and on Monitoring and Ensuring the Quality of Health Care Practices, indicating less engagement with care-related tasks.
- Correlations between the American and Australasian scales were stronger for both RPNs and RNs than either's relationship to the UK scale.

Fig. 4 Relationship between years working as a rehabilitation nurse and mean composite scores on each scale



- Longer rehabilitation RN experience was associated with higher mean competency scores on all scales, indicating less engagement with care-related tasks
- Longer rehabilitation RPN experience was associated with lower mean competency scores on all scales, indicating greater engagement with care-related tasks.

Conclusions

- RPNs and RNs show similar levels of engagement with care-related tasks in stroke rehabilitation units.
- Responses are most consistent for RPNs and least consistent for NPs, likely reflecting the NPs' more specialized roles.
- Years of rehabilitation nursing experience influences RPNs and RNs differently.
- Exploratory and confirmatory factor analyses will be conducted to examine the latent constructs underlying the scales..