

Networking

The 'Research Spider': a simple method of assessing research experience

Helen Smith, David Wright, Stephen Morgan, Joan Dunleavy Wessex Primary Care Research Network, Southampton and Michael Moore Three Swans Surgery, Salisbury, UK

Background

Initiatives that offer help to primary care practitioners interested in research are ubiquitous throughout the UK. Whether these initiatives are formulated as research networks or as support units, they are all challenged with matching their activities with the existing skills and perspectives of participating practitioners. In 1997 the Wessex Primary Care Research Network developed a simple tool to assess research skills and experience so that we could plan our educational programme to reflect the learning needs of our multi professional membership.

The 'Research Spider' is a star-plot style questionnaire for self-completion. To ensure face and construct validity the questionnaire was developed in consultation with practice-based researchers and academics. It has 10 scales (or limbs) relating to discrete components of the research process upon which members rate their research experience from 1 = no experience to 5 = very experienced (Figure 1).

Evaluation

This novel approach to data collection has been formally evaluated among members of our network. To confirm its validity we tested the con-

struct that the degree of research success should predict self-reported research experience. Network members were categorized into one of five groups:

- 1) Group A: Holder of research grant >£10 000 and/or author of at least four peer-reviewed publications;
- 2) Group B: Holder of research grant between £5000 to £10 000 and/or author of at least two peer-reviewed publications;
- 3) Group C: Holder of small research grant <£5000 and/or author of one peer-reviewed publication;
- 4) Group D: Recipient of WReN Bursary and/or author of nonpeer-reviewed article(s) or letter(s);
- 5) Group E: No grants or publications.

A stratified random sample of 97 members was taken to represent the range and distribution of research success within our network. To test repeatability, 4 weeks later we sent a second copy of the Spider plot to a one in four random sample of respondents.

Results

Seventy per cent (68/97) of the questionnaires were returned completed. Eight–two per cent of respondents felt that the completion of the Spider plot enabled them to give a 'good' or 'very good' summary of their research experience and 88% of respondents found it easy to complete. The scores on individual limbs were well spread (range 1 to

Address for correspondence: Dr Helen Smith, Wessex Primary Care Research Network, Primary Medical Care, Aldermoor Health Centre, Aldermoor Close, Southampton, SO16 5ST, UK. Email: hes@soton.ac.uk

Look at each of the boxes in the diagram and use the scale to record how much experience you already have in that area. Circle the appropriate number according to the key.

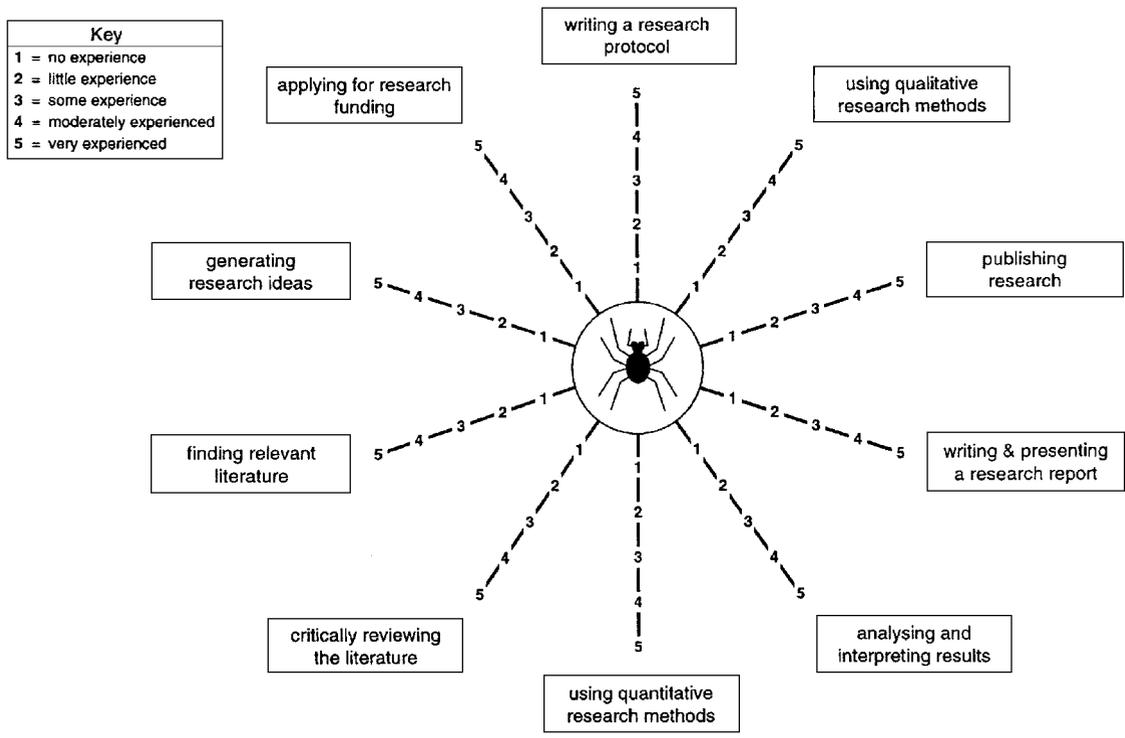


Figure 1 Research experience

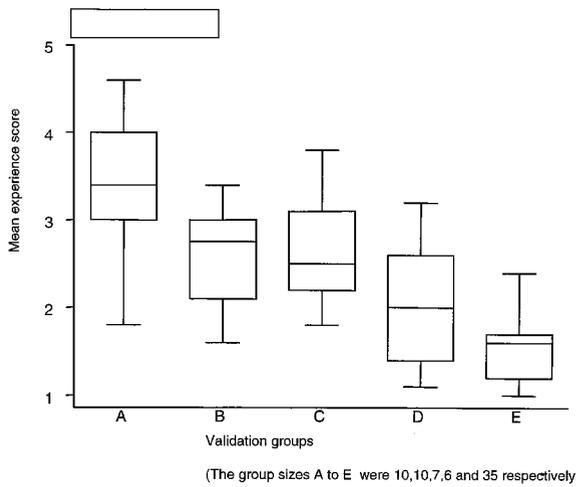


Figure 2 Box and whisker plots of self-reported experience by group

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5) and individual’s mean score correlated very well with their research experience (Spearman’s rank correlation = -0.73 , $P < 0.0001$) (Figure 2). The test–retest reliability of the experience score was excellent (Spearman’s rank correlation = 0.95 , $P < 0.0001$).

Summary

This plot provides a simple and efficient way of estimating research experience across a large multiprofessional group so that training courses can be developed at the appropriate level and priority given to the topics where skills are most lacking. This information also enables us to target mail shots about forthcoming courses to those for whom the information is most relevant. We commend the Spider to other research capacity building initiatives.