

Pilot and Validation of the SHReD Learning Styles Questionnaire for Patient Education

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BACKGROUND

- Health literacy is a global issue resulting in a range of poor health outcomes¹
- 60% of Australians have inadequate health literacy²
- Providing individualised education based on preferred learning style has the potential to improve health literacy³
- No validated tool exists to determine learning style preferences in patients

AIM

- Develop and validate a questionnaire that healthcare professionals can use to identify patients preferred learning styles in order to provide tailored education

METHOD

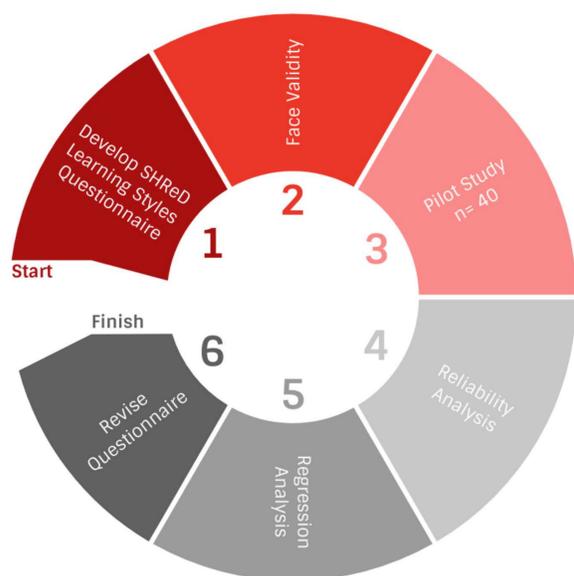


Figure 1: Flow diagram representation of method

- Face validity was determined using feedback from a diverse panel of health care experts (n = 6)
- Pilot study (n = 40) was conducted to collect data for statistical analysis
- Reliability analysis determined Cronbach's alpha values to measure the internal consistency of the questionnaire
- Regression analysis was performed to detect questions that under or over measured a particular learning style

RESULTS

- Expert feedback during face validity identified that the questionnaire was too long and repetitive
- Reliability analysis found a high degree of internal consistency with a Cronbach's alpha value of 0.92
- Regression analysis highlighted that question 6 under measures hearing and question 12 over measures doing (see Figure 2)

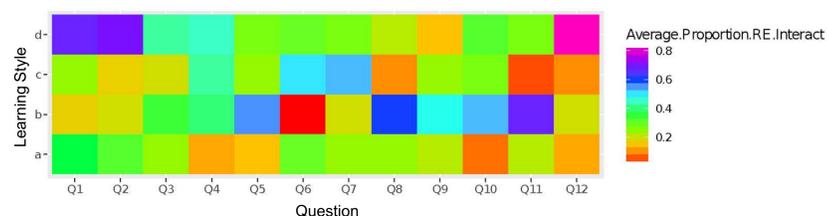


Figure 2: Generalised linear mixed model estimating proportion of participants selecting each learning style within each question. Learning style: a = seeing, b = hearing, c = reading/writing, d = doing.

- 65% of pilot study participants were multimodal learners (see Figure 3)
- Of the unimodal learners, 25% were identified to learn by doing and none by seeing (see Figure 3)

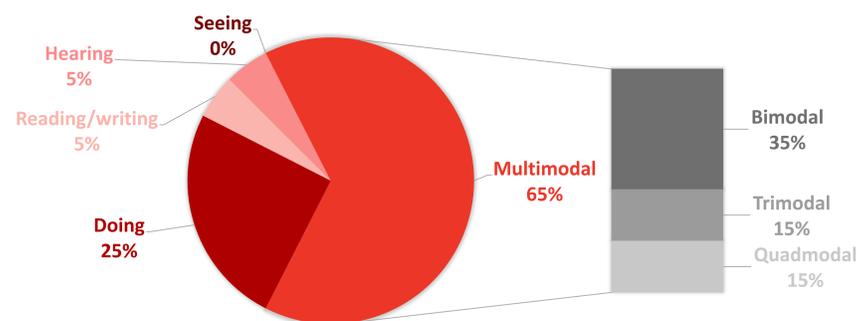


Figure 3: Learning style proportions found in pilot study participants

DISCUSSION/CONCLUSION

- Validity assessment revealed that revision of the questionnaire was required, resulting in two questions being omitted from the final questionnaire
- The SHReD Learning Styles Questionnaire is now a validated tool for identifying patients preferred learning styles and is ready to be trialed in a patient population
- Future research should involve coupling the questionnaire with an educational intervention to determine if individualising patient education improves health knowledge

References

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