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**Translation and validation of the Health
Sciences-Evidence Based Practice (HS-EBP)
questionnaire for nurses in Taiwan**

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Lambda Beta-at-
Large Chapter in
Taiwan, R.O.C

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Disclosure

- Corresponding Authors
 - Mei-Ling Yeh, Professor of National Taipei University of Nursing and Health Sciences
- Secondary Author
 - Hung-Da Dai, Supervisor of VGH, Taipei, Taiwan
- Acknowledgement
 - Sponsored by Cheng Hsin General Hospital
 - Project NO.: CHGH107-IU01
- Learner objective
 - Recognize a reliable and valid measurement tool in evaluating the clinical evidence-based practice

Outlines

- Background
- Purpose
- Method
- Results
- Conclusion
- Limitations
- References

Background ₁

- Evidence-based practice (EBP) has been introduced in Taiwan and has become an important paradigm in health care for more than a decade.
- Almost every healthcare institution holds on-the-job education or training related to evidence-based practice, however, the practical application of clinical evidence to provide care remains to be explored.

Background ₂

- In order to support implementation strategies at an institutional level, so as to achieve evidence-based health service management, there were different form of self-reported measuring instruments were developed domestically to evaluate the abilities of healthcare professions, or to assess the facilitators and barriers to EBP.
- However, those instruments were focusing only on the use of the results of scientific research in practice, and weaknesses in the psychometric procedures also limited their objectivity and utilization.

Background ₃

- Based on the five steps of EBP process, Fernández-Domínguez et al. (2016, 2017) proposed the Health Sciences-Evidence Based Practice (HS-EBP) questionnaire using the Delphi technique, and this new psychometric tool provided adequate reliability and validity evidence in measuring transdisciplinary evidence-based practice.

Purpose

- To translate the Health Sciences-Evidence Based Practice (HS-EBP) questionnaire from English to Chinese.
- To examine the content and construct validity, as well as the internal consistency reliability of the Chinese version of the HS-EBP.

Method

- Study Design
 - This is a methodological study.
- the consent of the original author obtained
- approval from the ethics review board also received

Method –Subjects

- Subjects
 - Two convenience samples of 165 and 235 clinical nurses from a regional hospital in northern Taiwan.
- Inclusion criteria
 - Clinical nurses who have been on-the-job for > 3 months
 - Age above 20 y/o
 - With RN license
 - Willing to participate
- Exclusion criteria
 - hospital experience < 3 months
 - Nurses not in clinical setting or supervisors and above

Method – Research Tool

- Demographics
 - Including age, education level, clinical work experience, work unit, clinical ladder level, on-the-job education and/or training of evidence-based practice
- The Health Sciences-Evidence Based Practice (HS-EBP) questionnaire.
 - A five-factor latent structure
 - Total 60 items

Method – Research process

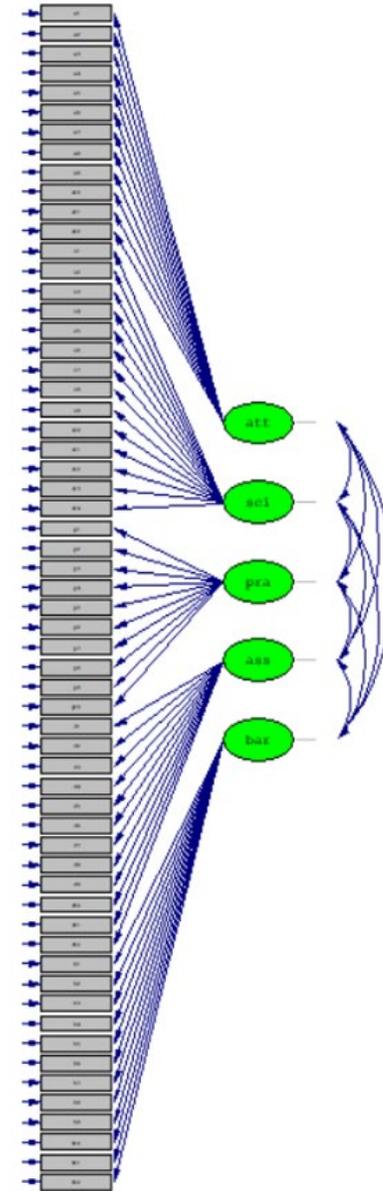
- Establish initial Chinese questionnaire content
- Back-translation
- Comparison of back translation results with the original version
- Check content validity
 - Importance, relevance, clarity
- Distribute questionnaire and analysis

Method – Statistical analysis method

- Liseral version 8.0 for confirmatory factor analysis(CFA)
- SPSS 22.0 for exploratory factor analysis(EFA), and Cronbach's α

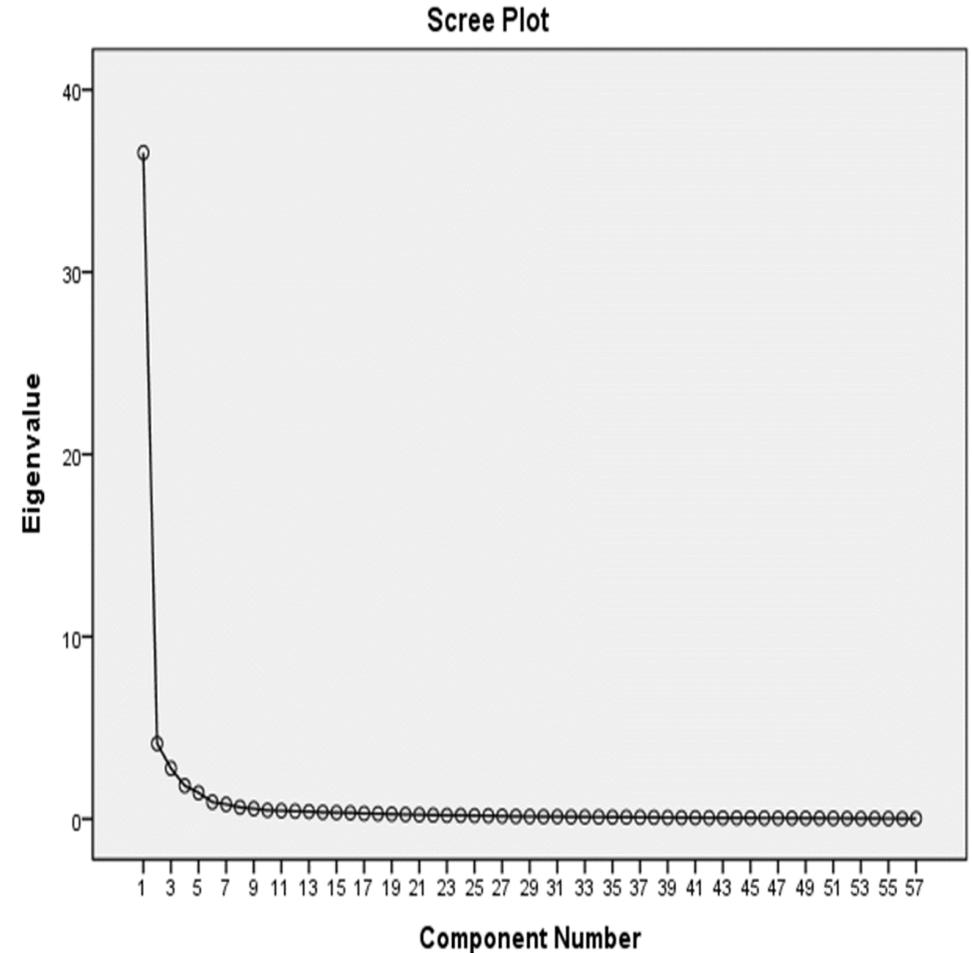
Results – CFA (N=325)

- The confirmatory factor analysis revealed a fair fit of the model to the data and root mean square error of approximation (RMSEA) of 0.098 and a comparative fit index (CFI) of 0.824.



Results – EFA (N=165)

- After deleting the 5th and 7th items of the "Results from Scientific Research" facet, and also the first item of the "Development of Professional Practice" facet, the five factor structure of the Chinese version HS-EBP questionnaire was explored well, with 64.12% explained variance.



Results – Cronbach's α

Section	Cronbach's Alpha	N of Items
Belief–Attitude	<i>.979</i>	12
Results From Scientific Research	<i>.975</i>	14
Development of Professional Practice	<i>.968</i>	10
Assessment of Results	<i>.985</i>	12
Barriers–Facilitators	<i>.976</i>	12

Conclusion

- The Chinese version of the Health Sciences-Evidence Based Practice (HS-EBP) questionnaire showed to measure the attributes of the clinical evidence-based practice with acceptable reliability and validity.
- Healthcare institutes which value quality of care may use this instrument to evaluate the trans-professional evidence-based practice.

Limitations

- Convenience sample
- Language and culture difference

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