Selecting an Instrument

Important Psychometric Properties using the General Well-Being Schedule as the Example
Challenges for some novice nurse researchers is the development of personal research skills to select instruments.

- Providing an example of an instrument

- Providing tools for selecting an instrument and evaluation of the psychometric qualities of the example instrument.

- Important to choose appropriate instruments for research and to speak to instrument quality by using psychometric criteria.
Selecting an Instrument

• The nurse researcher’s ability to select instruments and judge the quality of instruments is a necessary skill for building a strong research program.

• It is important to understand the construct under study, the instrument development, testing, and usage.

• Example: General Well-Being Schedule – Dupuy, 1978
• The conceptual basis of the GWB instrument

• Discussion of the known, published, psychometric properties will be noted in several articles

• GWB has been used, for several decades, in a large body of research

• History of the construct: “well-being”

• The Factor structure
EXAMPLE: General Well-Being Schedule

- History of the CONSTRUCT: “well-being”
- Conceptual basis of the GWB Schedule Instrument
- Description of the GWB Instrument
GWB Quality – Psychometric Properties

• Reliability – Test – Retest Reliability

• Internal Consistency

• Validity

• Factor Structure and Analysis

• Conclusions and Recommendations about the GWB
Nurse Researcher Implications

• **Improving Reliability**
  - be sure that the raters/examiners that collect the data are responsible, competent, and trained to use the instrument.
  - Supervise the collection of the data and periodically check the raters/examiners.
  - Standardize the conditions while testing/using the instrument and minimize distractions.
  - Ensure that directions and the wording of the questions leave nothing to interpretation.
  - Standardize the data collection.

• **Validity**
  - simply: when you select an instrument to use in your study you must be sure that its validity has been thoroughly evaluated
  - Use previously tested instruments to enhance your research
Conclusions

• Selecting instruments is an extremely important research skill along with making a judgement on whether the instrument is conceptually relevant and deciding if the instrument will yield data of sufficient high quality.

• ONWARD . . . . with building credible nursing research programs in order to strengthen EBP and our nursing profession.