

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

Selecting an Instrument



- 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.