

Identifying & Developing Quantitative Scales for Service Learning Research

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Robert G. Bringle, Director, IUPUI Center for Service and Learning Professor of Psychology and Philanthropic Studies rbringle@iupui.edu

Julie Hatcher, Associate Director <u>jhatcher@iupui.edu</u>

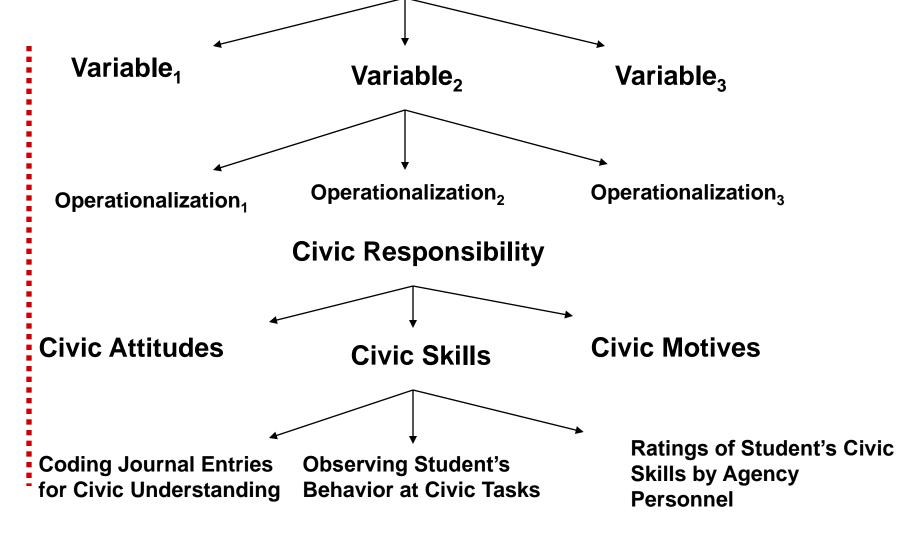


Convincing Research

- Guided by theory
- Clear constructs
- Control for differences among groups
- Multiple indicators
- Multiple methods
- Converging results across different methods
- Confidence in conclusions
- Implications for teaching and learning in general



Construct





Use of Multiple Indicators

- Multiple indicators are superior (quantitative and qualitative) whether focusing on:
 - Items on a scale
 - Time samples
 - Journal entries
 - Courses or campuses
 - Skills
 - Intentions



A scale is nothing more

than a structured interview

on paper.



Characteristics of Good Scales

Temporal consistency (reliable)

Internal consistency (coherence)

Validity (meaningfulness)



Uses of Scales

- Independent variable (e.g., process evaluation, quality control, manipulation check)
- Moderator variable (e.g., under what conditions, for what types of students)
- Mediating variable (e.g., intervening variables)
- Dependent variable (e.g., what outcomes)



Measurement Issues

Sensitivity

Focus

Meaningfulness

Match to other factors (e.g., IV)



Developing an Original Scale

- Takes a large amount of time and resources
- Requires knowledge of scale development procedures
- Runs the risk that the result may not be a "good" scale



How to Begin

- Create consensus on purpose and value of the research
- Identify internal/external resources
- Collaborate with others (on campus, regionally)
- Set regular meetings
- "Playful piety" and peanut M&M's



Identify Constructs

- Review literature of existing theory
- Consult with others
- Conduct focus group or structured interviews of participants
- Establish good theoretical statement(s)



Create Survey Questions

- Multiple item measures
- Debate the minors
- Informal respondants
- Review/use campus assessment instruments
- Format of survey is important



Pilot Testing of Survey

- Takes time
- Evaluate validity
- Coefficient alpha
- Revise/edit/delete weak items



Constructs in Retention and Service Learning Study

- Peer Interaction
- Faculty Interaction
- Career Relevance
- Active Learning
- Personal Relevance
- Civic Responsibility
- Course Satisfaction
- Perceived Learning