

Research as Part of Graduate Training: Nuts, Bolts and Assembly

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Outline of Presentation

- Importance of student affairs research
- Creation of a facilitative training environment
 - Theories of research training
- Brainstorming and collaboration
- The process (e.g., items, sequencing, creating surveys, data collection, IRB, etc.)
- Important Issues (e.g., authorship, use of large data set)
- Example of Research Project

Importance of Research in Student Affairs

Student affairs professionals:

- Help students with personal, educational and career-related challenges
- Roles
 - liaison, consultant, advocate, and direct service provider

Importance of Research in Student Affairs (continued)

- Mission/Goal: To help facilitate improved outcomes for our students
- Necessitates up-to-date knowledge base on the student population
- Evaluate our services

Importance of Research in Student Affairs (continued)

- Developmental consistencies across time
 - developing an autonomous self
- The danger of a static view

But Aren't College Students Always College Students?

- Rationale for continually updating the knowledge base
 - A changing socio-political-economic- and historic context
 - Each campus is unique: providing direct information regarding each incoming class
 - Opportunity to contribute to scholarly dissemination of information

Supportive System for Student Affairs Research

- One example of a supportive system for research
 - University of Maryland Counseling Center 's research team
 - Team of staff members and graduate assistants across stages of training

Supportive System for Student Affairs Research (continued)

- Goal: To provide assessment and evaluation of student issues
- **Increasing the knowledge base of our student population**
- Theme: Connected and separate
 - Direct line to student concerns
 - No political agenda

Additional Benefits: Training our Graduate Students

- Transmission of values regarding the importance of research in student affairs
- Graduate students attain
 - a facilitative attitude towards research,
 - necessary research skills, and
 - appreciation of the ethical and applied issues
- Benefit from the energy and current knowledge base of our graduate students

How do we Create a Facilitative Training Environment?

- Goal:
 - enhance graduate students' research self-efficacy
 - Influence future research
- Charlie Gelso's (2006) Research Training Environment Theory

Research Training Environment Theory (Gelso, 2006)

- general ambivalence towards research
- Gelso's (2006) environmental conditions
 - Modeling appropriate scientific behavior
 - Early Involvement in minimally threatening research projects
 - Integration of research and science
 - Conditions will foster self-efficacy in research!

Research Self-Efficacy Theory

- Bandura's Self-Efficacy Theory
 - Social-cognitive-environmental factors → confidence within a particular domain
- Research Self-Efficacy Defined
 - Confidence in research tasks (e.g. performing a literature review, analyzing data, drawing implications).
 - Empirical Evidence: Research self-efficacy → interest, actual research involvement, and level of productivity

Brainstorming

We ask:

- What are issues of concern related to students/incoming students?
 - Who are the students
 - What are their needs

Brainstorming (continued)

- For that, we
 - Go to the journals
 - Listen to/Talk to colleagues
 - Coffee lounge
- Read professional journals
- Study topics of concern in journals

Brainstorming (continued)

Specific areas we consider:

Student development

Identity, career issues, coping with transition, attachment to parents

Diversity issues

Campus culture

Sense of belonging

Ethical behavior

Attitudes towards drinking, sports behavior

Collaborating with other Campus Departments and Researchers

- Graduate assistantships from different academic programs
- Ask Assistant Directors in other divisions what they would like to know
- Consult with faculty with qualitative and quantitative backgrounds

The Process

- Once a year we brainstorm - requesting input from the vice president of Student Affairs, Director, Assistant Directors CC

The Process (continued)

- We work as a team on:
 - ideas, scale selection, approval to use scales, IRB proposal, permission to invite students to participate, technical aspects of data collection
 - Data clean-up, scale creation
 - Creation of presentations, locally, nationally, internationally,
 - manuscripts preparation

Items and Scales

- Determine constructs of interest
- Conduct literature review for established measures

Items and Scales (continued)

- Important considerations:
 - Appropriateness for college student population
 - Validity established with diverse student populations
 - Psychometric properties of measure
 - Scoring information provided? Ease of scoring
 - Length
 - Cost
- Alternatives:
 - Modified version of established measure
 - Self-developed measure
 - Single items

Permission to Use Scales

The use of any published or unpublished measure requires you to obtain permission from the author.

1. Mail or email the author to ask for permission.
2. Permission from only one author is sufficient.
3. Secure their permission in writing if the material is copyrighted.
4. If this fails ask APA or another professional organization for more up-to-date information.
5. If attempts to locate the author fail, request permission from the copyright holding publisher.

Creating a Survey, Sequence Items, Scales

- Importance of using pre-validated measures
 - Validity and reliability statistics already calculated for measures in question
 - Comparison of statistical values found in previous studies with current sample

Creating a Survey, Sequence Items, Scales (continued)

- Organize questions according to themes
- Likert scale options coded in same direction
- Consider placement of questions addressing sensitive topics
 - Order effects?
 - Sensitive questions at the end?
 - Including these items at all?

Creating a Survey, Sequence Items, Scales, (continued)

- Unique questions/circumstances
 - May need to tailor existing questionnaires to campus populations
 - Consider demographics and contexts of samples in prior studies
- What about open-ended questions?

Institutional Review Board Issues

- IRB ethics course
- Deadline to send in proposal
- Description of the study
- Scales
- Informed consent , 18 years and older?
- Protection and storage of data, identifiers
- Addenda, if necessary
- Renewal

Data Collection, Analyses

- Create web based survey
- Create website for the survey
- Create an initial letter to invite students to participate – include the website link
- Schedule when initial email invitations go out
- Schedule when reminder emails go out.

Data Collection, Analyses (continued)

- Receive email addresses from the orientation office for mega mailers
- At the end of data collection take the survey off-line
- Place the data in SPSS format

Data Collection, Analyses (continued)

- Check the data for errors
- Write syntax for and create scales
- Run reliability coefficients
- Create projects- analyze!

Writing the Manuscript: Authorship

Guiding Principles offered by Fine and Kurdek (1993):

What qualifies for authorship credit?

- Involvement in crafting the research design
- Writing substantial portions of the manuscript
- Integrating research theories.
- Tasks such as inputting or crunching data **do not** count as authorship.

Authorship (continued)

Steps for Researchers to Follow (Fine & Kurdek):

- Acculturate new researchers to authorship responsibilities.
- Assess the skills of the research collaborators.
- Decide on tasks.

Authorship (continued)

- Renegotiate agreements about credit and order as needed.
- If necessary, consult outside colleagues.
- Other options:
 - Points system of weighing researchers' relative contributions
 - Running workshops on authorship
 - Writing manuals to guide authorship decisions.

Authorship (continued)

“Just like in any good relationship, role clarity is important. People will be happy with the agreement if they trust one another, know their responsibilities, and set and meet the same set of expectations.”
(Kurdek)

Multiple Analyses from a Single Data Set

- Avoid *piece-meal publication*: Be thoughtful and purposeful.
- Determine *unique questions* that can be addressed as a team. Consensus is key!
- Rely on theory to guide these decisions.
- Avoid *data fishing*: This may inflate Type I error and lead to erroneous results.

Examples of Different Research Projects

Career development and college success

- The Importance of Career-Related Parental Support for the Educational and Vocational Development of Incoming College Students
- Culture and College Success: Learning from the Strengths of At-Risk Groups

Examples of Different Research Projects (continued)

Underrepresented groups and college success

Social, Academic, and Career Development
Aspects of Success in College: A Look at First
Generation Students

- Relation between ethnic identity and multicultural attitudes for Latina/o students

Examples of Different Research Projects (continued)

Physical health and well-being

- Body Image Among Women of Color:
What Mediates Culture?
- Sources of Meaning in Life for College
Students

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Additional Resources

- For more information on copyright:
<http://www.apa.org/about/copyright.html>
- Other relevant resources:
<http://www.apa.org/science/faq-findtests.html#unpublished>