

NACADA <i>The Global Community for Academic Advising</i>	<p style="text-align: center;">Conducting Research in Academic Advising</p> <p style="text-align: center;">2012 NACADA Summer Institute</p> <p style="text-align: center;">Dr. Rich Robbins, Bucknell University</p>
<p>NACADA Executive Office Kansas State University 2323 Anderson Ave, Suite 225 Manhattan, KS 66502-2912 Phone: (785) 532-2717 Fax: (785) 532-2722 e-mail: nacada@ksu.edu</p> <p>© 2012 National Academic Advising Association</p> <p>The contents of all material in this presentation are copyrighted by the National Academic Advising Association, unless otherwise indicated. Copyright is not claimed as to any part of an original work prepared by a U.S. or state government officer or employee as part of that person's official duties. All rights are reserved by NACADA, and content may not be reproduced, downloaded, disseminated, published, or transferred in any form or by any means, except with the prior written permission of NACADA, or as indicated below. Members of NACADA may download pages or other content for their own use, consistent with the mission and purpose of NACADA. However, no part of such content may be otherwise reproduced, stored, transmitted, downloaded, disseminated, published, or transferred in any form or by any means, except with the prior written permission of NACADA, or as indicated below. Any such reproduction, storage, transmission, downloading, dissemination, publication, or transfer without the prior written permission of NACADA is a violation of federal law and is subject to criminal and civil penalties. NACADA and National Academic Advising Association are service marks of the National Academic Advising Association.</p>	<p>The presenter acknowledges and appreciates the contributions of NACADA colleagues Rich Robbins, Josh Smith, Marsha Miller, and the members of both the NACADA Research Committee and the NACADA Task Force on Infusing Research into Academic Advising in preparation of materials for this presentation</p>

NACADA <i>The Global Community for Academic Advising</i>	<p style="text-align: center;">NACADA View of Research</p> <p>NACADA views research as scholarly inquiry into all aspects of the advising interaction, the role of advising in higher education, and the effects that advising can have on students. It regards consuming and producing research as the collective responsibility of all members of the higher education advising community, including advisors, faculty, administrators, and students.</p> <p style="text-align: right;"><i>NACADA Task Force on Infusion of Research, 2008</i></p>
--	---

NACADA <i>The Global Community for Academic Advising</i>	<p style="text-align: center;">Why Research Academic Advising?</p> <ul style="list-style-type: none"> • Academic advising is a collective experience among most college students • Academic advising is an integral part of student development • Academic advising is teaching, with a discipline and pedagogy • Professional disciplines utilize inquiry and resulting data to inform decision making • There is much anecdotal information re: the power of effective advising, but little empirical research
--	--

NACADA <i>The Global Community for Academic Advising</i>	<p style="text-align: center;">Wide Range of Audiences</p> <ul style="list-style-type: none"> • Peers in academic advising • Advising administrators • Higher Education • Field of Advising • Deans, Provosts, and Presidents • Individual advisors • Students • Parents
--	---

NACADA <i>The Global Community for Academic Advising</i>	<p style="text-align: center;">Research as Scholarly Inquiry – It's Not Just Experiments and Surveys</p>
--	---

NACADA <i>The Global Community for Academic Advising</i>	<p style="text-align: center;">Scholarly Inquiry May Include...</p> <ul style="list-style-type: none"> • Hypothesis testing • Replication of existing knowledge in new setting • Discovery of a novel phenomenon • Development of a new theory • Creation of new knowledge • Evaluation/assessment of effectiveness of new implementation or approach
--	--

Methods of Inquiry

- Experimental
- Quasi-experimental
- Ex-post facto (after-the-fact)
- Correlational
- Historical
- Ethnographic (cultural interpretation)
- Phenomenological (description of experience)
- Case study
- Longitudinal
- Program Assessment

Data Collection: Qualitative versus Quantitative

- Qualitative methods result in data being described in words, such as responses to open-ended questions
- Quantitative methods result in data being described in numbers (statistics, such as percentages, ratings)

Data Collection: Qualitative versus Quantitative

- Use Qualitative methods when:
 - little is known about the topic being assessed
 - closed-ended items (e.g., multiple-choice, scaled responses) cannot yet be determined
- Use Quantitative methods when:
 - potential subjects are not available for extensive interactions or observations
 - time and funds are limited
 - your audience requires “hard numbers”

Validity and Reliability

Validity considerations

- Accurate measurement and description of construct you purport to measure (internal validity)
- Results generalizable to a similar group, setting, or population (external validity)

Reliability considerations

- Items are related in meaningful ways (internal reliability)
- Individuals would respond similarly to the same test or experience on different day/location/time (test-retest reliability)
- Two similar and reasonable people would record similar scores based on viewing, reading, or interpreting the same event (inter-rater reliability)

Core Skills in Conducting Research

- I. Identify the problem
- II. Review the information
- III. Formulate the question
- IV. Identify the population and sample
- V. Collect data
- VI. Analyze data
- VII. Draw Conclusions

I. Identify the Problem

Identify three topics related to academic advising on your campus that are currently "hot" topics. What are you or others most curious about or most concerned about?

- 1.
- 2.
- 3.

Can you put one of these into the format of a research question?

II. Review the Information

- improve your knowledge base
- build upon previous research efforts
- generate ideas for research
- look for good methodology models
- become familiar with research publication formats
- establish basis to justify and support your research (and advising) efforts

Identify sources

- books
- journals
- bibliographies (of articles and in articles)
- indices
- conferences presentations proceedings
- database searches (ERIC, Social Science Citation Index, Education Abstracts, Psych Abstracts, etc.)

Take notes!

What to review?

- previous research on same topics
- previous research on related topics ("parallel")
- research population (subjects)
- research techniques (methods)
- research materials (surveys, tests)
- theoretical frameworks

When do I review the literature?

- at the start
- throughout the research process
- immediately prior to submission
- during revision process (if necessary)
- nearing final publication

III. Formulate the Question

- summarize your thoughts and clarify relationships
- identify the explicit question you wish to study
- where appropriate, state your question as a hypothesis to be confirmed or rejected
- share the question with colleagues and revise several times until it clearly articulates what the inquiry process will shed light on

IV. Identify the Population and Sample

- define potential participants
who? how many? how will you reach them?
- will you research the entire population, or select a representative sample?
- will you need to use informed consent?
- will you need human subjects clearance?

Most post-secondary institutions have a person or committee that reviews proposed research and supports or rejects the use of humans as subjects. These may be termed:

- Human Subjects Committee
- Institutional Review Board
- other similar titles

- you must obtain clearance from your respective review entity in order to conduct your research
- all federally funded research requires approval at both the institutional level and the federal level

Note: NACADA requires institutional support to be considered for a NACADA Research Grant

Other Considerations

- think about ways to provide research findings back to participants - honor their voices and contributions
- stay true to your consent forms and the integrity of the protections of human participants

V. Collect the Data

- utilize the data collection technique that is most suited to adequately answer your research question
- identify the limitations of your choice
- consider multiple or mixed methods when appropriate
- do not get caught up in the false dichotomy of qualitative vs. quantitative

VI. Analyze the Data

Descriptive versus Inferential Statistics

Descriptive: A picture is worth a thousand words

Techniques, both analytical and graphical, that are used to simply describe or paint a picture of a data set (e.g., mean, median, mode, standard deviation, range, percentages; pie charts, other graphs)

Descriptive versus Inferential Statistics

Inferential: A number is worth a thousand pictures

Techniques used to draw conclusions or make inferences about a large group of objects are based on observation of only a portion of the group (e.g., ANOVA, MANOVA, multiple regression, chi-square, other methods to generalize from the sample to the overall population)

VII. Draw Conclusions

Consider the observed facts and the way in which you arrived at those facts. Then draw conclusions from your results. Conclusions may or may not:

- support your hypothesis
- refine an existing theory
- develop a new theory
- justify or prove program effectiveness
- improve the practice of a single advisor

Developing a Research Project

Select one of your “hot topic” research questions...

- which common research method would most effectively provide you with valid answers to your question(s)?
- given the method selected, identify the group or groups, phenomena, or records to be evaluated or assessed

- review the existing information on the topic
- which form of data analysis will you utilize?
- draw conclusions from the analysis
- share the results – locally, regionally, nationally

Conclusion

- commit yourself to the time and resources needed
- seek support of administrators
- ask for help from colleagues and collaborate with others
- follow sound research practices from the start
- submit your work for peer review
- list your project with the NACADA Research Registry

NACADA Research Committee web site:

<http://www.nacada.ksu.edu/AdministrativeDivision/research.htm>

For information on:

- NACADA's research agenda
- Writing a NACADA research grant
- Additional research resources
- Contact information

THANK YOU!

Conducting Research in Academic Advising
2012 NACADA Summer Institute