



EDSP 702: SPECIAL TOPICS

JANUARY 24, 2018



FOR TODAY

- Introducing acquisition and evaluation of knowledge
- Introduction to the matrix of analysis
- Context analysis

ODD THING FOR TODAY

- The US Government shutdown means that PubMed is not updating information.

NEW THING AS OF MONDAY

- The academic journal *Political Analysis* “will no longer report p values in regression tables or elsewhere. There are many reasons for this change—most notably that a p value alone does not give evidence in support of a given model or the associated hypotheses.”
- Does this hurt or help in the effort to improve utility of research?

EVIDENCE-BASED PRACTICES

- Discussed changes that must take place in the foundation of research for EBPs to be viable
- So much culture change to go. But here we are—now what?
- Phase two of EBP: selection and evaluation of research

STEP TWO: SELECTION AND EVALUATION OF RESEARCH

- After you have identified the universe of evaluated interventions that are close to meeting your needs
- Assumptions:
 - No research will fit perfectly to your clinical need
 - Limitations of the utility of published research is a given
 - Change is hard (like really hard)
 - Easier to alter what implementers are already doing than making major and fundamental change
 - Weight of evidence is a factor
 - Judgment is required, but a framework is a good start

PART ONE: CLINICAL NEED

- Identify needs of target client
- Identify needs of implementer
- Resources available: time, material, training, support, money
- System culture: innovation acceptance, individualization orientation, history, law/regulation, personnel evaluation methods

PART TWO: EFFECT ANALYSIS

- Examination of difference between current performance of client and desired
- Examination of effect size (pre/post)
- Determine if there is a large enough effect size to justify attempting change

PART THREE: RESEARCH ANALYSIS

- Break down identified studies into component parts
- Resources
- Core design features

PART FOUR: ALIGNMENT

- Match clinical need and research analysis

PART FIVE: DECISION MAKING

- Function of effect size and alignment
- Investment distance vector (i.e., empowerment factor)
- Cultural change

THE TOOL FOR THE JOB: MATRIX OF ANALYSIS

- Mostly part three: research analysis, but we will discuss other aspects
- This is your major course assignment: content collection
- Identify research studies that evaluate an intervention in your area
- Organize through the matrix of analysis

LET'S PRACTICE

- <https://goo.gl/forms/w7MJeXOwoozsAC4nI>

NEGOTIATING CONSTRUCTS

Name	Construct	Other Factors
Janet		
Emma		
Vanessa		
Yukwal		
Greg		
Megha		
Gwen		
Cristina		

DISCUSSION OF PAPERS

- 1. Baker, M. (2016). 1,500 scientists lift the lid on reproducibility. *Nature*, 533(7604), 452–454. <https://doi.org/10.1038/533452a>
- 2. Biesta, G. (2007). Why “What Works” Won’t Work: Evidence-Based Practice and the Democratic Deficit in Educational Research. *Educational Theory*, 57(1), 1–22. <https://doi.org/10.1111/j.1741-5446.2006.00241.x>
- 3. Buchan, A. (2015). The medical student perspective on how to fix evidence based medicine. *Student BMJ*; London, 23. <https://doi.org/http://dx.doi.org/10.1136/sbmj.h2860>