

THE ART OF EVIDENCE-BASED PRACTICE

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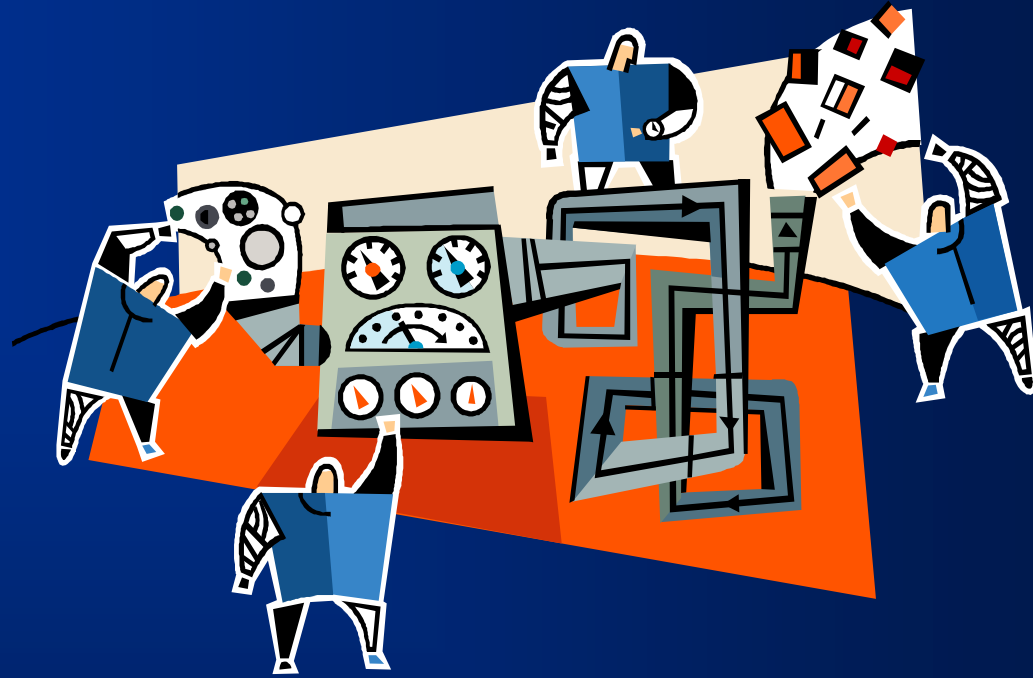
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The Fundamental Problem



FROM BENCH TO TRENCH



Workers objections to EBP:

- It takes away my freedom to use my clinical skills
- I don't have time to research best practices, or use EBP in my practice
- Most of my clients are unwilling/unable to do collect evidence or use the specific techniques
- EBP just isn't useful in the "real world"
- Research just doesn't transfer to practice
- There really isn't enough evidence out there

Yet...

Workers hold their own medical doctors to higher standards of evidence-based care than they hold themselves in their own practice...

Gambrill & Gibbs, 2002

The shared goal...

Providing the best opportunities for our children and families to have safe and meaningful lives...

Barriers to implementing EBP

1. Structural problems for funding new EBPs;
2. No tradition of agencies as “learning organizations” changing as new best practices emerge;
3. The gulf between research and practice communities;
4. Marketing by unsupported or questionable practices, lack of marketing by EBPs;
5. Lack of incentives to programs to implement EBPs and/or use outcome-based thinking.

**EVIDENCE-BASED PRACTICE
IS A KEY TOOL TOWARDS
MEETING THIS SHARED
GOAL!**

(Besides, it is not
nearly as hard to do
as you think)



WORKSHOP OBJECTIVES

At the end of the workshop, participants will be able to:

1. Define evidence-based practice (EBP);
2. Locate and identify research relevant to their clients;
3. Integrate EBP into their own practice;
4. Evaluate effectiveness and develop and test new tools using evaluation skills

WORKSHOP STRUCTURE

1. Defining evidence-based practice
2. Evidence in Child and Family services
3. Evidence and Assessment
4. Choosing the best treatment
5. Implementing treatment and Evaluating practice
6. Evidence as part of an iterative process

1. DEFINING EVIDENCE-BASED PRACTICE

What is EBP and why should we use it?

EVIDENCE-BASED PRACTICE IS...

...the conscientious and judicious use of current best practice in making decisions for individual treatment

Sackett, et al, 1997; Howard, McMillen & Pollio, 2003

EBP IS NOT

- The slavish implementation of mandated protocols
- Atheoretical
- Anti clinician expertise
- Anti professional

...rather, it is an approach to practice that supplements theory, expertise and professionalism

EBP AND ETHICS

Evidence-based Practice is Ethical Practice!

- NASW Code of Ethics (Standard 4.01)
- Standards for the Practice of Social Work with Groups (Section 1J)

What is evidence?

- Evidence is all types of systematically collected information
 - Randomized clinical trials
 - Laboratory research
 - Epidemiology
 - Qualitative methods
 - Expert consensus
 - Our own practice

Contrasting EBP with Traditional Practice

Traditional Practice

- Subjective experience
- Creative process with fluid boundaries
- No link between research and practice
- Evaluation focuses on number of services
- Research created in labs by “eggheads”
- Evidence solely developed outside the system

Evidence-based Practice

- Objective evidence
- Art created within boundaries of evidence
- Direct link, fundamental to practice
- Outcome driven evaluations
- Research collaboration by field and researchers
- Evidence collected routinely at all levels of the system

A word about terminology...

- ***Best practices*** - the use of interventions with demonstrated efficacy or effectiveness addressing specific issues/populations;
- ***Application in practice*** - by workers using clinical expertise in determining how to apply evidence in practice situations;
- ***Evaluation*** – used by practitioners to assess desired results;
- **Outcomes assessment** – collection of data by systems-of-care to examine program/system effectiveness.

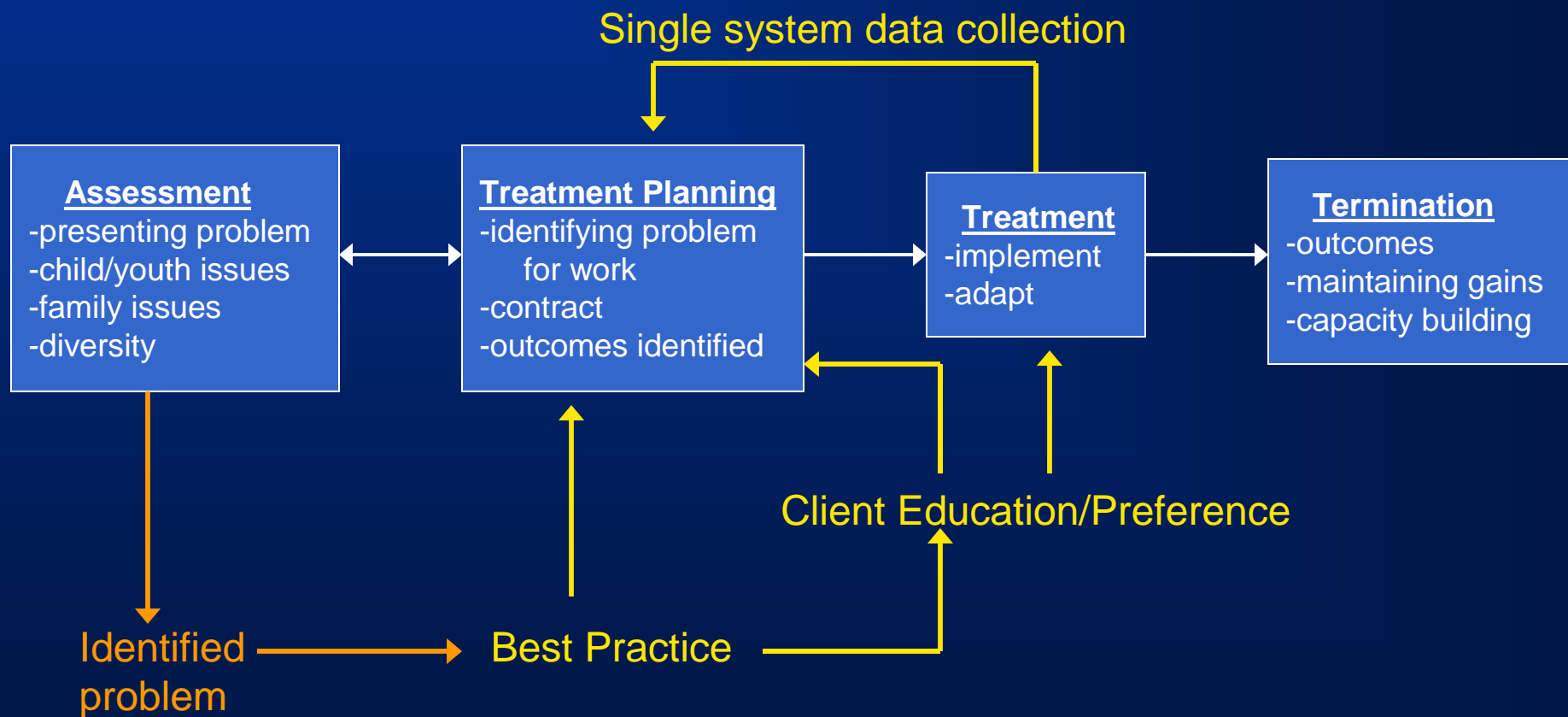
Essential Elements of Application to Practice

- ***Determination of best evidence*** – locating and evaluating evidence's research merit, practice relevance and appropriateness;
- ***Application in practice*** - by workers using clinical expertise in determining how to apply evidence in practice situations;
- ***Evaluation*** - to assess desired results.

The role of theory, evidence, and development/systems in direct practice

Theory

Development/systems



2. EVIDENCE IN THE CHILD AND FAMILY SERVICES

Are we helping?

ARE WE PROVIDING EFFECTIVE SERVICES?

- Expert reviews of current services indicate that most services provided in CFS are not evidence-based
- Many widespread models have been demonstrated not to be effective
- Most CFS workers have not heard of many of those practices demonstrated to be effective

Why bother?

- Because best practices change as new evidence becomes available
- Sometimes well-established techniques can be shown to be harmful under certain circumstances
(eg., corrective attachment therapy; Saunders, et al., 2003)
- To avoid “re-inventing the wheel”

ARE THERE EFFECTIVE MODELS?

- Short answer—“yes”
- There are a variety of best practices that meet evidence-based criteria that have been found to be effective
- Although it is not the purpose of the workshop to advocate for specific models, it is worth listing a few to answer the objection of “not enough evidence”

EBPs (Part 1)

- Preventing physical abuse and neglect:
 - Nurse Family Partnership Model (Olds, et al., 1998)
- Child neglect
 - 12-Ways/Safecare model (Chambliss & Gershater-Molko, Lutzker & Wesch, 2002)
- Physical abuse
 - Parent-Child Interaction Therapy (Chambliss & Ollendick, 2001)
 - Multisystemic Therapy (Brunk, Henggeler & Whelan, 1987)

EBPs (Part 2)

- Sexually-abused children with trauma:
 - Trauma Focused Cognitive Behavioral Therapy (TF-CBT) (Cohen & Mannarino, 1997)
- Juvenile sex-offender treatment
 - Multisystemic Therapy (Borduin & Schaeffer, 2001; Henggeler et al, 2003)
- Children in foster care
 - Parent Management Training (Kazdin, 1997; Forgatch & Martinez, 1999)
- Conduct Problems in early childhood
 - The Incredible years (Webster-Stratton & Hammond, 1997)

IS IT POSSIBLE TO IMPLEMENT BEST PRACTICES IN THE REAL WORLD?

- Most EBPs come with a lot of directions on how to perform them correctly
- In many cases, violating assumptions can lead to EBPs not being effective.

Example: Assertive Community Treatment

KEEPING UP WITH THE STATE-OF-THE-ART

- Examining practice reviews (e.g., Cochrane library:
<http://www.cochrane.org/reviews/clibintro.htm>)
- On-line search engines (e.g.,
<http://scholar.google.com>)
- Reading professional journals
- Professional associations
- Conferences and workshops

CORRECTLY IMPLEMENTING EFFECTIVE MODELS

- Most EBPs come with a lot of directions on how to perform them correctly
- In many cases, violating assumptions can lead to EBPs not being effective.

Example: Assertive Community Treatment

THE ROLE OF OTHER EVIDENCE

- Not all evidence is related to treatment

Example #1: Findings around medications (e.g., SSRIs and suicide in adolescents)

Example #2: New research findings (e.g., association between Television and ADD)

UPDATING EVALUATION SKILLS

Not all evaluations are the same...

- Improvements in software
- New ideas on design and focus
- Examination of within-group variables
- Improved/new standardized assessments

3. EVIDENCE IN THE ASSESSMENT PROCESS

Collecting and Using Information
to Guide Treatment Formulation

COLLECTING EVIDENCE: FROM WHOM?

- Not all informants are the same
- Person with the problem vs. Family/Social Support vs. Other system (e.g., teachers, psychiatrists)

Example: ADD and teachers

COLLECTING EVIDENCE: ABOUT WHAT?

- Problem-centered assessments
- Person-centered assessments
- Strengths/capacity-centered assessment
- Narrative vs. standardized assessments
- Systems-based assessments

WHAT IS APPROPRIATE DATA?

- Information about the presenting problem
- Individual capacity/strengths
- Relevant social supports/systems
- Diagnosis
- Services received
- Treatment history

STANDARDIZED DATA

- Assessments must include useable information
- Use of existing instruments with demonstratable reliability and validity allow the clinician to match assessment to available treatments
- Standardized instruments can be administered prior to session to guide planning

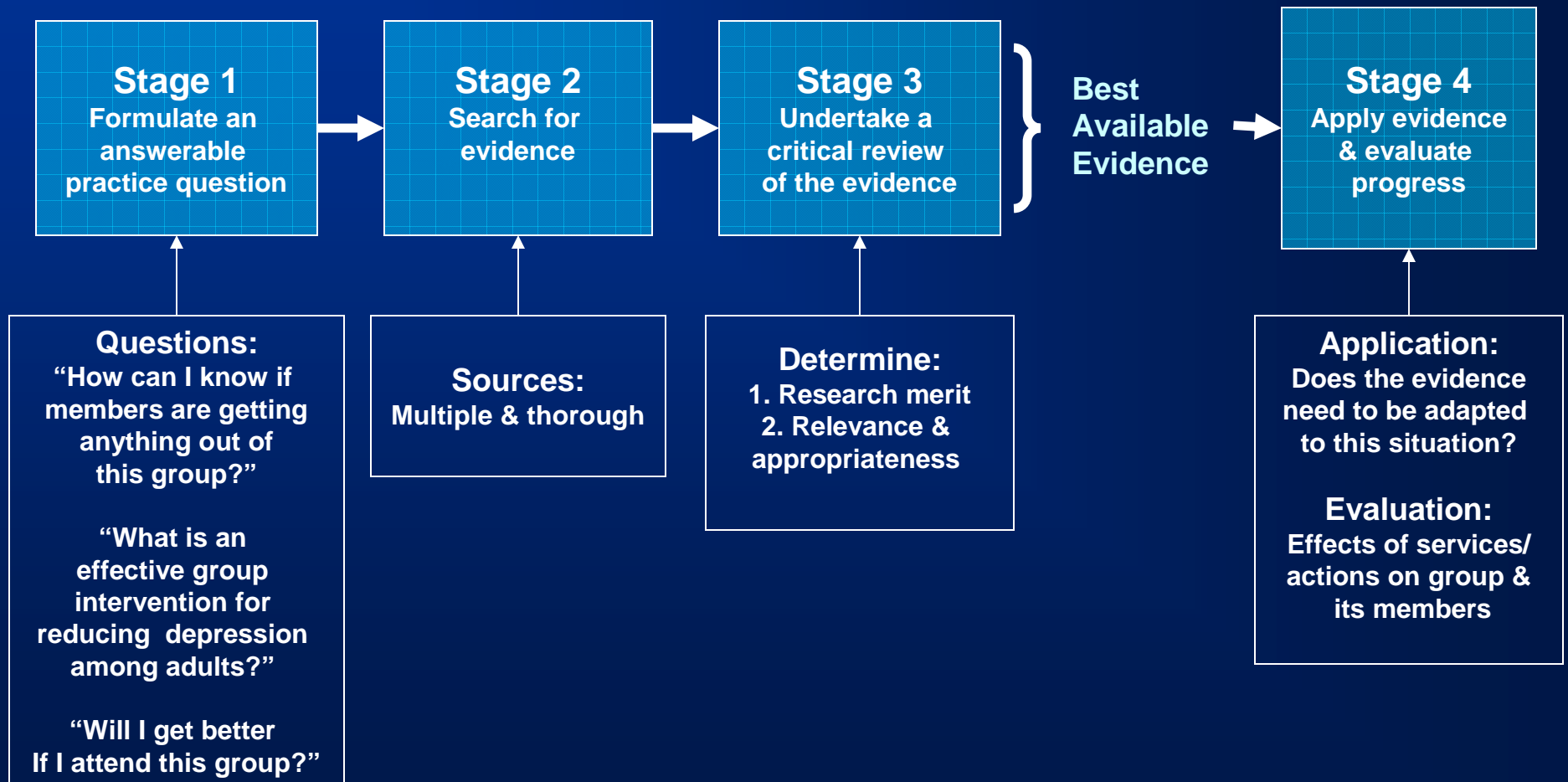
CAUTIONS ABOUT STANDARDIZED DATA

- It does not substitute for relationship
- Clients are more than their scores
- Standardized approaches can answer only the questions for which they were designed
- Are often really, really boring...

FORMULATING ANSWERABLE QUESTIONS

- What is the problem?
- How is it measurable?
- Creating treatment hypotheses

EBP Summarized



4. CHOOSING THE BEST TREATMENT

Finding and Matching Treatment

FINDING THE BEST EVIDENCE

- Searches must be multiple and thorough
- Using search engines with multiple terms
- Scanning journals and announcements

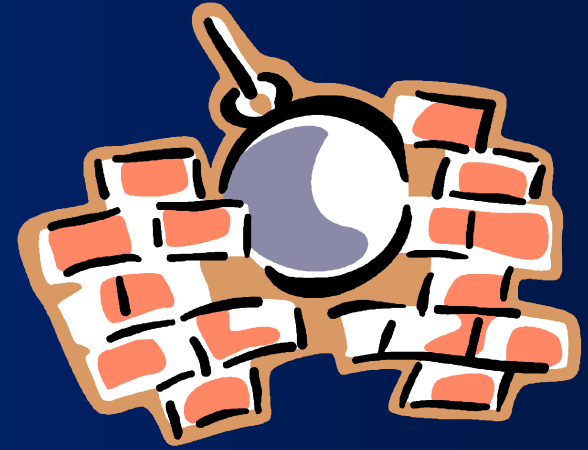
EXERCISE 1

1. Break into groups around your areas of interest
2. Design an on-line search strategy, using as many terms as possible
3. Where else might you look?

EFFECTIVE FOR MY CLIENT?

- Evidence is often (almost always) either general in nature, or specific to a very particular population
- Part of a “real world” use of EBP consists of understanding the fit between the evidence and the client. This is a two step process...

Deconstruction

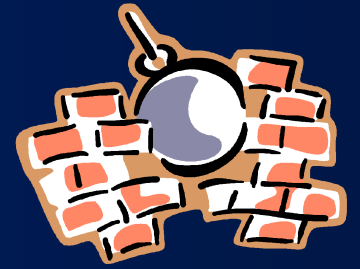


and



Reconstruction

“DECONSTRUCTING” THE EVIDENCE



- Now that the evidence has been collected, it is necessary to “deconstruct” it to your client...
 - How does the evidence apply to my client?
 - How close does the population studied match my client?
 - In the case of an intervention, has it been studied for my unique client?

“RECONSTRUCTING” THE EVIDENCE



- Now that the evidence has been deconstructed, it needs to be implemented
- This can be thought of as “reconstructing” the evidence into action
- This is a collaborative process, involving both client education and preference
- Together, you decide how to implement...

CLIENT EDUCATION AND CHOICE

- Evidence consistently suggests that client engagement and involvement are critical factors in successful treatment...
- Clients willingness to “do” the intervention is as important a factor as the effectiveness of the treatment.
- Thus, education and choice are key parts of EBP.

A FUNDAMENTAL TRUTH

If the client does not return to therapy, the greatest intervention in the world will not be effective!

5. IMPLEMENTING TREATMENT AND EVALUATING EFFECTIVENESS

How do I know if what I'm doing works?

THE “REAL WORLD” AND EBP

- Balancing intervention demands with clients system competencies
- Balancing client experiences with interventions

How many of us have heard this?
“I tried it and it didn’t work.”

COLLABORATING ON IMPLEMENTATION

- Implementing the EBP of choice does not have to follow the protocols developed by researchers,
- Many families are not ready or willing to begin following complex protocols.

How many of us have heard this?
“I tried it and it didn’t work.”

BUILDING SUCCESS IN IMPLEMENTING EBP

- Just as education and choice are key to selecting interventions, collaboration is critical to implementation.

What is the client willing to do?

Are multiple implementation steps necessary?

How do we engage the client in this process?

A FUNDAMENTAL TRUTH

If you can't explain it,
and don't understand it,
you can't do it, and your
client won't succeed!

HOW DO WE KNOW WHEN WE'VE BEEN SUCCESSFUL?

A series of questions:

- Don't we just know?
- Successful at what?
- What if we fix something that we don't know about?
- What if the first thing we work on is not the real problem?

GOOD QUESTIONS!!!

Quick answer: If we've asked an answerable question, then we can develop a useful evaluation.

EVALUATING EFFECTIVENESS

- Identifying data to be collected
- Collecting baseline data
- Data collection methods



IDENTIFYING DATA TO BE COLLECTED

- Answering the answerable question
- Who collects the data?
- Behavioral measures versus affective states
- Conceptualizing the data

COLLECTING BASELINE DATA

- Data should be easily operationalizable
- Data should be of sufficient frequency to capture change, but not of so much frequency as to present an undue burden
- What you choose to measure needs to make sense to the client and in terms of the problem for work

WHAT TYPE OF DATA WORKS BEST?

- Issues of validity
 - Reliability of data
 - Are we measuring accurately?
- Needs to relate directly back to the problem for work
- If implementing an established EBP, look to what the research used as outcomes

DESIGNING DATA COLLECTION PROCEDURES

- Single system designs...
 - Pre- and Post-
 - Pre-, intervention a, intervention b...
- Collecting data on triggering events
- Collecting structured data
 - E.g., hourly behavioral charts in schools

EXAMPLE: SCHOOL BEHAVIORAL CHART

Class Period	Did behavior occur? (y/n)	Triggering event
Home room		
Math		
English		
Lunch		
P.E.		
Social Studies		

Student Name _____

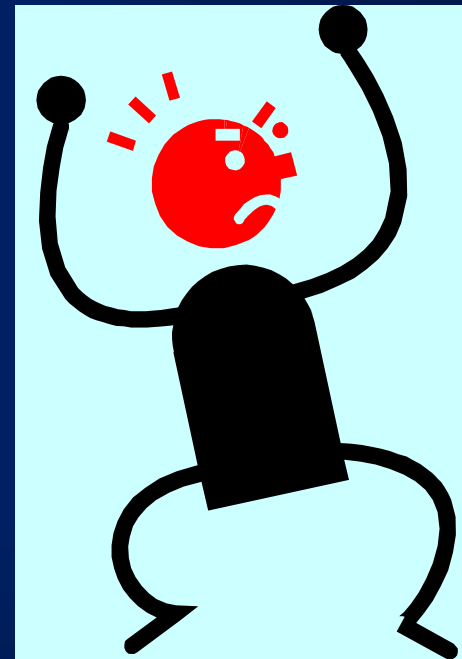
Date _____

EACH CLIENT IS DIFFERENT

- “If at first you don’t succeed...”
- “Truthful” vs. “Useful” data
- Feasible vs. Optimal

AN EXAMPLE: MEASURING TANTRUMS

- Time
 - What time of day?
- Intensity
 - How loud or violent?
- Duration
 - How long does it last?
- Triggering events
 - What started it?
 - What ended it?

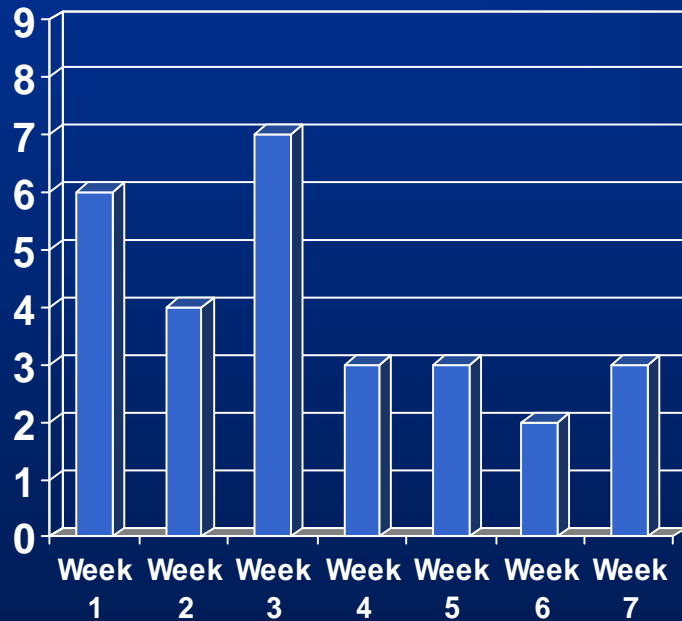


DATA ANALYSIS: NOT JUST FOR RESEARCHERS ANY MORE

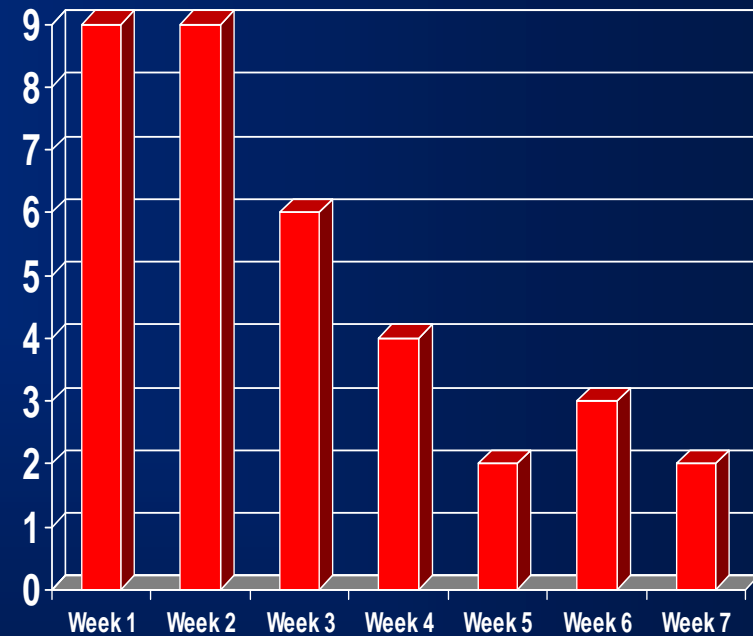
Data analysis does not equal fancy statistics...

- Results need to be clear to all
 - Charts work beautifully
- Beware of natural variation
 - “Honeymoon” false results
- Often, this type analysis will reveal change before client “feels better”
 - Availability heuristic

EXAMPLE: TWO WAYS OF ASSESSING TANTRUMS



■ Number of tantrums

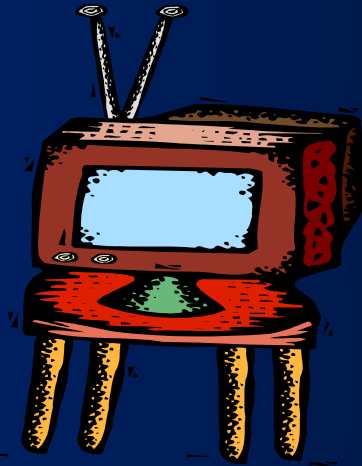
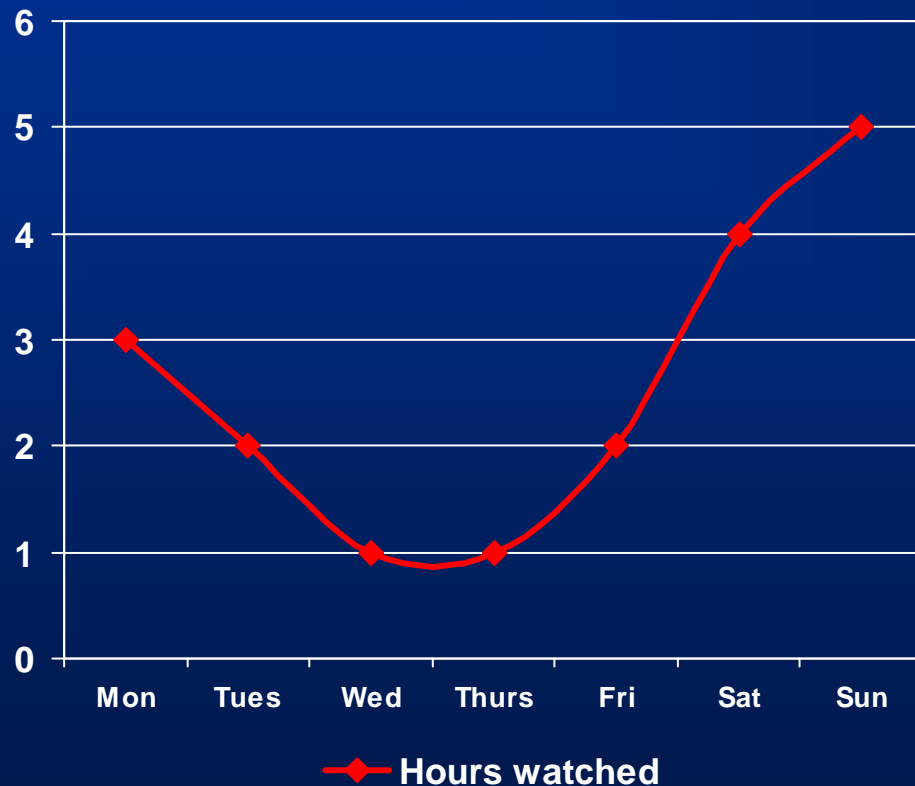


■ Intensity (parent rated)

EDUCATING THE CLIENT AROUND READING RESULTS

- Just like with identifying interventions, client participation and input is important.
- Their ability to understand the data collected can help you understand puzzling results.
- These interpretations can be incredibly valuable.

AN EXAMPLE: COLLECTING DATA ON TELEVISION USE



What do you think is going on?

TIRED CHILD = TANTRUMS

True story—

- Baseline data revealed that my 6-year old client's tantrums all occurred after 10:00 pm.
- My brilliant intervention—putting the child to bed earlier.
- Result: No more tantrums...

EXERCISE 2

- Identify a common problem for work with your population
- What might be some measurable goals?
- What data would you collect?
- How would you present it to your client?

6. EVIDENCE AS PART OF AN ITERATIVE PROCESS

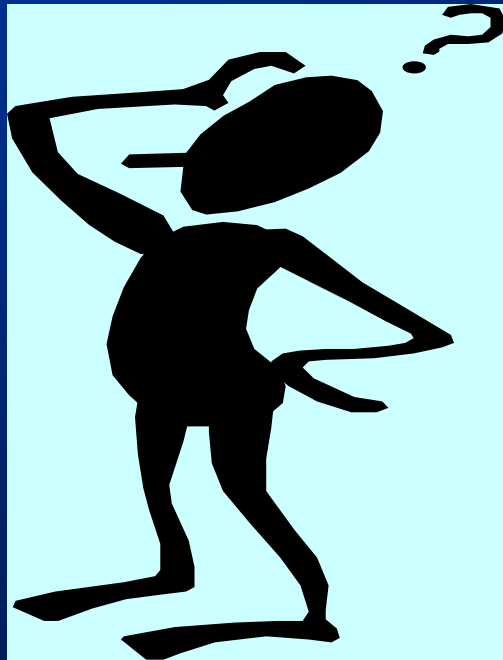
The myth of pre-/post- methods in
clinical practice

DATA COLLECTED CAN SHOW...

- No gain/regression
- Improvement

This information is valuable!

Sometimes your first intervention works...



...often it doesn't

This information is valuable!

WHAT TO ASK WHEN THE CLIENT DOESN'T SHOW GAINS..

- Am I collecting the right data?
 - Is the intervention changing the behavior on which I am collecting data?
- Is the client collecting the data correctly?
 - Is it too difficult? Not complex enough?
- Is there something I don't know?
 - Have I missed something?

INCREASING THE COMPLEXITY OF YOUR DATA COLLECTED

- If the client successfully collects initial data, it is worth considering increasing the complexity of the data collected.
- Often, measures can be made more sensitive.
- Another possibility—have the client record more qualitative data.

THE NEXT QUESTION...

Generalizing what you have learned

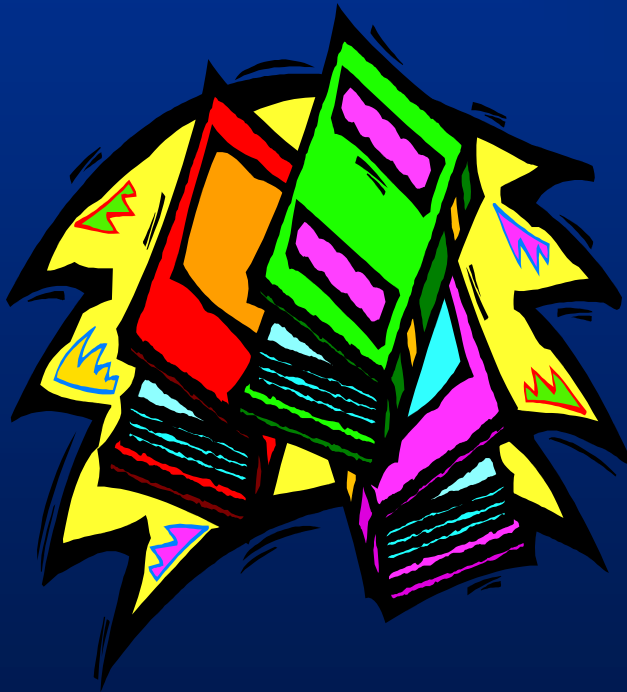
- If you have succeeded in your first goals, you can generalize
- Options include adding additional goals, increasing the ones in place
- Interventions can be added

DESCRIPTIONS OF PROCESS

Information does not have to be
“countable”

- Progress notes as data
- Qualitative evidence
- Documenting consumer preference
- Calendars as data

SHARING WHAT WORKS: DISSEMINATING OUR OWN EVIDENCE



- Once you've created your intervention and done some testing, it is possible to present and publish it.
- Many journals exist that publish exactly this kind of work

Any Questions

