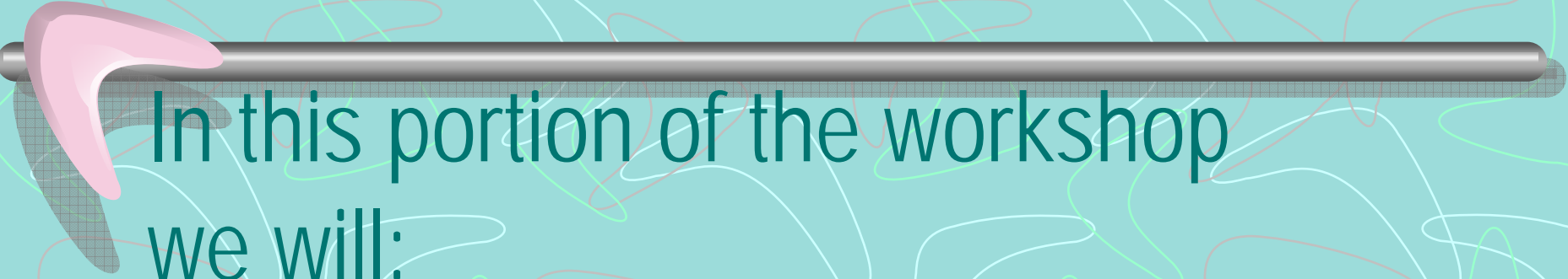


Research



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In this portion of the workshop we will:

- Look at the history and rationale of research in the social sciences.
- Consider how paradigms change over time.
- Discuss the process of diffusion.
- Look at problems with technology transfer.
- Discuss levels of research.



A Brief History of Research

- The Scientific Method is the use of orderly, systematic procedures that researchers follow as they identify a problem, design a study to investigate the problem, collect and analyze data, draw conclusions, and communicate the findings.
- Wood & Wood (1999)



Why conduct research?

- The obvious is not always true.
- It is important to know that results are not merely the byproduct of chance.
- To identify for whom and under what circumstances the discovered results apply.



Why conduct research?

- Research is done in a manner that can be replicated.
- Research is disseminated.



Why Research in The Addictions?

- There is a disconnect between public perception regarding outcomes in addiction treatment and what data has shown over forty years.
- There is little common language in the addiction field:
 - Many workers come from diverse backgrounds
 - It is also a transient field



Why Research in The Addictions?

- There a strong “folk-medicine” tradition in the addictions field:
 - An anti-intellectual bias
- We work with a stigmatized population and stigma rubs off.



Types of Research

- Naturalistic observation
- Laboratory-based research
- Correlational studies
- Clinical case studies – single case
- Multiple clinical case studies
 - Longitudinal
 - Cross sectional
- Surveys



Branches of Study in Psychology

- Social Psychology
- Biological Psychology
- Medical Psychology
- Clinical Psychology
- Industrial/Organizational Psychology



Branches of Study in Psychology

- Clinical Psychology
- Industrial/Organizational Psychology
- Addiction Psychology
- And many others...



Common Research Problems

- Positive result bias
- Placebo effect
- Selection bias
- Confounding causes



Common Research Problems

- Correlation is **not** Causation
- Jumping to conclusions
- Lying
- Dissemination to implementation



Dissemination Methods

- Print Media
 - Journals
 - Magazines
 - Books
 - Brochures, Newsletters, Pamphlets
- The Internet



Dissemination Methods

- Videos
- Conferences
- Workshops
- Classrooms
- Mentoring
- Clinical supervision



Defining Evidence-Based Practices

- “Evidence-based practice usually refers to programs or practices that are proven to be successful through research methodology and have produced consistently positive patterns of results.”
- Pamela Waters, Southern Coast ATTC



Defining Evidence-Based Practices

- The acceptability of research varies:
 - Over time
 - State by state
 - Presenter by presenter
 - Agency by agency



Levels of Evidence-Based Practices

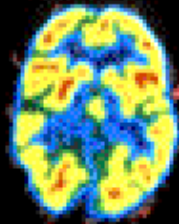
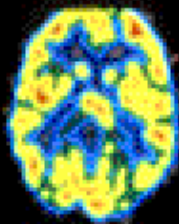
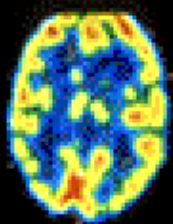
- *Evidence-Based Level One:* The product is based on a program/principle that has been identified or recognized publicly, and has received awards, honors, or mentions.
- *Evidence-Based Level Two:* The product is based on a program/principle that has appeared in a **non** peer-reviewed professional publication or journal.



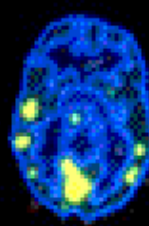
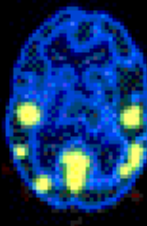
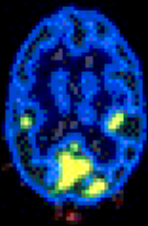
Levels of Evidence- Based Practices

- *Evidence-Based Level Three:* The product is based on source documents that have undergone thorough scrutiny in expert/peer consensus processes for the quality of its implementation and evaluations methods, or is based upon material that has appeared in just one or a few peer reviewed journals.

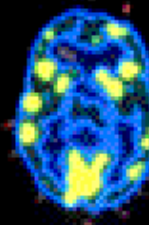
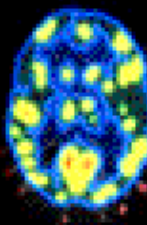
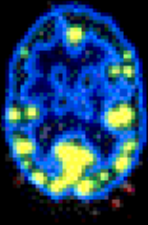
Your Brain After Drugs



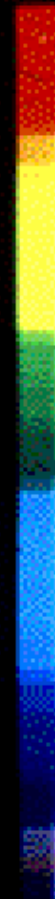
Normal



Cocaine Abuser (10 da)




Cocaine Abuser (100 da)





Levels of Evidence- Based Practices

- *Evidence-Based Level Four:* The product is based on programs/principles that have undergone either a quantitative analysis or an expert/peer consensus process in the form of a qualitative analysis.
- *Evidence-Based Level Five:* This product is based on programs/principles that have been replicated in many refereed journals over time.



Interventions that are not currently evidence supported

- Group
- Anti-depressants
- Thirty-day treatment programs
- Motivational Interviewing



Evidence-Supported Practices

- Cognitive Behavioral Interventions
 - Including skills building activities
 - Education, medical services, job training
- Community Reinforcement Approach
- Twelve-Step Facilitation
- Contingency Management
- Modified from list created by Dr. Steve Gallon



Evidence-Supported practices

- Pharmacological Therapies
- Systems Treatment
- Family Therapy
- The Therapeutic Relationship
- Strengthening Families - Prevention



How paradigms change

- A paradigm is “an implicit body of intertwined theoretical and methodological belief that permits selection, evaluation, and criticism.
- To be accepted as a paradigm, a theory must seem better than its competitors, but need not (and in fact never does) explain all of the facts with which it is confronted.

(Kuhn, 1970)



How do the paradigms change?

- They become increasingly unable to answer all of the questions that arise naturally or are the result of purposeful research.
- An alternative theory emerges that withstands critics from the predominant and competing paradigm.
- The advocates of previous paradigms either adapt or leave the field.



Barriers to Change

- Historic
 - The roles of researchers and clinicians
- Technical
 - Do we actually know how to do this?
- Systemic
 - Systems do not change quickly



Barriers to Change

- Programmatic
 - How does this affect the bottom line?
- Community
 - Is this in line with what we think we know and want?
- Clinician
 - How does this affect me?
- Client
 - And me?



References

- Addition Messenger, produced by the Northwest Frontier ATTC, for copies go to www.nfattc.org
- Kuhn, T. S. (1970). The structure of scientific revolutions. Chicago: University of Chicago Press.
- Wood, S. E., and Wood, E. G. (1999). The world of psychology (3rd Edition). Boston: Allyn and Bacon.