





Psychotherapy Research I



Roles of Clinical Psychologists

- Scientists: evaluate their area of focus and related theoretical propositions using the scientific method
- Practitioners: utilize a research-based understanding of human behavior and psychosocial issues to help others to resolve psychological difficulties and achieve adjustment



Efficacy versus effectiveness

Efficacy

- Using a well-controlled experiment, can we show that the treatment affects the outcome?

Effectiveness

- Does the treatment affect the outcome in the real-world?

Methodological Issues

- Design
- Procedures
- Measuring Change

Types of control groups I

- No-treatment control
 - Withhold treatment
- Considerations
 - Ethical issues: withholding treatment from distressed individuals
 - Validity issues: diffusion of treatment, resentful demoralization
 - Potential bias: subject role, negativistic

Types of control groups II

- Waiting List Control
 - Delay rather than withhold treatment
- Considerations:
 - No possibility of long-term comparison
 - Ethical issues – withholding treatment to very distressed clients
 - Validity issues – diffusion of treatment, resentful demoralization
 - Potential bias: client's expectancies

Types of control groups III

- Attention-placebo control
 - Clients experience non-specific aspects
- Considerations
 - Used when goal is to address internal and construct validity
 - Conceptual definition of placebo
 - Credibility
 - Ethical issues: providing an ineffective tx to distressed individuals

Types of control groups ... Again

- Standard treatment control
 - Control group receives the current standard care
- Considerations
 - Avoids ethical issues
 - Minimizes attrition and social threats to internal validity
 - Eliminates possible impact of non-specific factors

Other design issues

- Random assignment
 - Simple or randomized blocks
- Timing of assessments
 - Follow-up assessment, repeated assessments

Comparing treatments

- Comparability of groups
 - Blocked random assignment
 - Compare on factors relevant to outcome
- Comparability of therapists
- Comparability of interventions
- Adequacy of assessment
 - Coverage of targets for change
 - Side effects
 - Not biased toward one type of tx or another

Procedure Issues

- Using manual based treatments
- Integrity (manipulation) checks
- Generalizability across settings
- Generalizability across samples

Measuring Change

- Sources of assessment
 - Use multiple sources when possible
 - Use blind raters when possible
- Targets of Assessment
 - Assess multiple targets when possible
- Multi-method assessment

Procedure Issues

Intent-to-Treat Analyses

- Designed to address effects of attrition
- Perform two sets of analyses
 - Completers Analysis
 - Establishes efficacy
 - Outcomes for all clients enrolled
 - More conservative approach
 - Endpoint analyses
 - Analyses at completion
 - Pre-test as post-test analyses

Statistical versus clinical significance

- Statistical significance – probability based criterion for deciding whether an effect is reliable
- Effect size – magnitude of the effect
- Clinical significance – importance of the effect in everyday life, or to some applied criteria

Measuring clinical significance

Comparison Methods

- Normative Samples – after intervention, do clients fall in “normal” range
 - Reliable Change Index (RCI) – proportion of individuals moving from dysfunctional to normative range
 - Who should normative group be?
 - Should normative level be the goal?
- Dysfunctional Samples – after intervention, do clients differ markedly from dysfunctional persons (about 2 SD)

Measuring clinical significance

- No longer meeting diagnostic criteria
- Subjective evaluation
 - Usually global rating scales
 - Subjective and vulnerable to bias
 - Nonspecific – difficult to detect differences in tx conditions
 - Overall, subjective ratings are useful in conjunction with other measures of change

Measuring clinical significance

Social Impact Measures

- Assesses change according to outcomes relevant to society at large
- Prevention research
- Impact public policy
- Gross measures may not be sensitive to some interventions
- Outcomes are influenced by factors other than intervention
- Vulnerable to instrumentation

Process Research Methods

- What happens in psychotherapy?
- Do therapies differ and if so how?
- Do clients act and behave differently?
- What are the common factors across therapy modalities?
- What are the effective ingredients in treatment?
- What happens as clients improve?

What happens in psychotherapy?

- Naming, describing, classifying, and counting therapist behaviors.
- Naming, describing, classifying, and counting client behaviors.
- Measures differ according to many factors

Do therapies differ?

- Differences in participants' verbal behavior
- Differences in adherence ratings
- Qualitative differences in treatments

Systematic clients differences?

- Client differences in semantics
- Core Conflictual Relationship Theme
 - Look for patterns in clients' verbalizations in terms of
 - Wishes toward others
 - Responses of others
 - Responses of self

Systematic clients differences?

- Differences in cognition
- Differences in interpersonal behavior
 - The interpersonal circumplex
 - Dimensions underlie interpersonal processes
 - hostility to friendliness
 - dominance to submission
 - Can rate client or tx behaviors to examine adaptive interpersonal behaviors

Common psychotherapy factors

- Therapist common process factors
 - Warmth
 - New perspective
- Client common factors
 - Self-disclosure
 - Attention to experience
- Common relationship factors (alliance)
 - Attachment component
 - Collaborative component

Active therapy ingredients?

- Drug metaphor
 - Effective treatments administered with strength and integrity, should see positive change
- Correlate process and outcome measures across clients
- Criticism is that process and outcome are not related in a linear manner

Identifying active ingredients

Dismantling

- Experimental methods
- Isolate components of a tx package
- Identify necessary and sufficient ingredients for change
- Limitation is that tx characteristics may be hard to isolate and to intentionally add or remove

What happens as clients improve?

- Focus on processes that predict change across the course of therapy
- Qualitative methods typically used
- Procedures involve a detailed intensive examination of therapeutic discourse
- Often 1 or a few cases
- Useful in model development stages
- Conclusions should be viewed tentatively
