Change Process Research: Realizing the Promise

Robert Elliott
University of Strathclyde

e-mail: fac0029@gmail.com
Change Process Research (CPR): Definition

- Term introduced by Greenberg (JCCP, 1986)
- The study of how change occurs in therapy
- In particular: The in-therapy processes that bring about client change
  - Causes: direct, mediating, moderating
  - Also: Time course of change
- Update: 20 years later
- Look at in relation to Psychological Services Research (PSR)
Role of Change Process Research

- Necessary complement to Randomized Clinical Trials (RCTs)
  - These focus narrowly on establishing existence of a causal relationship between therapy and client change
  - But do not specify the nature of that relationship
- Also, causal relationships will not be accepted unless there is a plausible explanation or narrative linking cause to effect
- CPR can provide and support these explanations
Review of Main Genres of Change Process Research

**Basic Genres:**
- Process-Outcome
- Helpful Factors
- Micro-analytic Sequential Process

**Complex Genres:**
- Task Analysis
- Comprehensive Process Analysis

For each:
- Appeal
- Challenges
- Recommendations
- Relevance to Psychological Services Research
1. Process-Outcome Genre (Quantitative)

- Usually correlational design
  - Experimental designs possible but rare/ problematic (e.g., low external validity)

- Appeal:
  - The most popular genre; intuitively obvious, easy to design
  - Works well with measures of good process (e.g., depth of client exploration, alliance)
1. Process-Outcome Genre (Quantitative) - Challenges:

- Therapist responsiveness suppresses effects for key theory relevant therapist processes
  - e.g., interpretation, chairwork, homework
- Limited by area of dose-response curve sampled (\(\int\) and \(\cap\) functions)
- Correlational design challenged as subject to third variable causation, not currently accepted by several major review schemes
- Process-outcome scale and causal chain gaps limit clinical usefulness
1. Process-Outcome Genre (Quantitative) - Recommendations:

- Should be accepted as one line of evidence (among several) for Evidence-Based Practice (EBP)
- Use new psychometric techniques (Rasch/IRT) to improve predictor & criterion validity
- Combine with other methods (e.g., Task analysis)
1. **Process-Outcome Genre (Quantitative) - PSR:**

- Possibilities for implementing in PSR context (treatment monitoring/audit):
  1. Frequent brief outcome measures (e.g., CORE-10, every 1-2 sessions)
  2. Brief client or therapist alliance ratings at (e.g., session 3)
  3. Implementation of treatment protocol (therapist self-ratings or supervisor)

- Being implemented in Strathclyde Practice-Based Research Protocol
2. Helpful Factors Genre (Qualitative)

- Includes Consensual, Grounded Theory, Narrative, Interpretative Phenomenological etc.
- Post-therapy (Change Interview) or post-session (Helpful Aspects of Therapy Form)
- **Appeal:**
  - Intuitively obvious
  - Fits with mental health user movement (“Ask the client”)
  - Draws on current popularity of qualitative research in professional training programs
  - Rapidly maturing
2. Helpful Factors Genre (Qualitative) - Challenges:

- Attributional errors; clients may follow cultural scripts
- May not be aware of or able to describe important processes
- Poor interviewing (e.g., leading questions) and superficial data analysis appear to be common
2. Helpful Factors Genre (Qualitative) - Recommendations:

- Should be accepted as one (among several) line of evidence for EBP
- Need methods for systematic qualitative research integration (qualitative meta-analysis, e.g., Timulak, 2007)
- Encourage deeper, more critical analysis, better training for qualitative interviewers
- Combine with other methods (e.g., interpretive single case designs)
2. Helpful Factors Genre (Qualitative) - PSR:

Possibilities:

1. Helpful Aspects of Therapy (HAT) Form: Client or therapist completes after each session
2. Sample of clients interviewed at end of therapy using Change Interview
3. Analyze data using qualitative or content analysis

Penn State Practitioner Research Network uses HAT
3. Micro-analytic Sequential Process Genre

- Generally quantitative; usually theory-testing
- Appeal:
  - Useful for testing practice theories
  - Very close to practice: if X, then Y
  - Study causal influence processes directly
3. Micro-analytic Sequential Process Genre - Challenges:

- Distance from therapy outcome
- Third variable causation may operate
- Difficult/time-consuming: selection, transcription, measurement, analysis issues
- Not particularly good for discovery-oriented research
- Has never really caught on; field has moved away from
3. Micro-analytic Sequential Process Genre - Recommendations:

- Should be accepted as one line of evidence for EBP
- Qualitative micro-analytic sequence analysis is underdeveloped and should be used more widely (e.g., Conversation Analysis of important processes or events)
- Combine with other methods (e.g., Task Analysis, Comprehensive Process Analysis)
- PSR possibilities: See next…
4. Task Analysis of Key Therapeutic Processes/Events

- Focused, rational-empirical mixed method research strategy (Rice & Greenberg, 1984; Greenberg, 2007)
- Combines: qualitative/quantitative micro-process sequence analysis; process-outcome; helpful factors

- Appeal:
  - Useful for explicating therapist implicit knowledge
  - Close to practice; useful for building clinical micro-theories
  - Defines program of research across studies
  - Can relate process to outcome
  - Uses pluralistic, converging operations
4. Task Analysis - Challenges:

- Complexity; not suited to one-shot investigations
- Based on a model of therapy as task-focused/client as active change agent
- Micro-analytic element is difficult/ time-consuming
- Under-utilized
4. Task Analysis - Recommendations/PSR:

- Can be used to build basic science in PSR context
- Should be more widely used to construct models of good practice
- Initial therapist qualitative interview phase under-utilized
  - Can be used in PSR context
  - Should appeal to qualitative researchers as an initial step
5. Comprehensive Process Analysis of Significant Therapy Events

- Focused, inductive mixed method approach (Elliott et al., 1994)
- Current version developed in Sheffield 1984-85
- Significant events typically identified by clients, selected for type (e.g., insight) and outcome
- Use with or without client tape-assisted recall data
- Combines: helpful factors, interpretive qualitative analysis, qualitative micro-process, quantitative outcome assessment
5. Comprehensive Process Analysis of Significant Therapy Events - Appeal:

- Uses pluralistic, converging operations within single study
- Yields rich understandings of significant events
- Close to practice; useful for building clinical micro-theories
- Useful source of analytic tools for other approaches (e.g., Stiles’ Assimilation Model)
- Flexibility: can be used to study a wide variety of therapies and types of events
5. Comprehensive Process Analysis of Significant Therapy Events

**Challenges:**
- Time-consuming/complexity/technical difficulty (requires mastery of range of methods)
- Under-utilized

**Recommendations:**
- Advocate small-n use for student research projects in professional training programs, as alternative to qualitative interview research
- Should be more widely used to construct rational models of good practice
5. Comprehensive Process Analysis of Significant Therapy Events

- **PSR possibilities:**
  - Apply CPA logic to whole treatments: Interpretive Single Case Causal Designs
  - Systematically examine alternative explanations of apparent change
    - Trivial change, statistical error, relational artifacts, wishful thinking
    - Self-help, extra-therapy events, medication, research effects
  - Especially appropriate for student projects
Conclusions - 1

- Many of CPR genres have proven useful over the past 50 years of therapy research.
- However, all have serious limitations and face various challenges.
- All are either:
  - Fallible, partial approaches to understanding how change occurs in therapy.
  - Or: Are time-consuming and technically difficult.
- Thus, CPR methods have not fully realized their potential to contribute to our understanding of how clients change.
Conclusions - 2

Future progress is likely to benefit most strongly from a more balanced approach that builds on several recent developments, among them:

- More careful, powerful qualitative methods
- Advances in psychometric methods (Rasch analysis)
- Interpretive case study methods (events or cases)
Conclusions - 3

- Overall, what is needed is:
  - Systematic methodological pluralism,
  - Requiring multiple lines of evidence,
  - To provide a more sound foundation for the evidence-based practice of psychotherapy.
Email: fac0029@gmail.com