Integrating Research and Practice: Old Problem, New Possibilities

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Research-Practice Gap in Psychotherapy

- Old problem: Morrow-Bradley & Elliott (1986) documented:
  - Practitioners rarely use research to guide practice
- General problem of knowledge dissemination: Medicine, engineering etc.
- Therapists learn from supervisors, clients, experience, not research
Likely Sources of Research-Practice Gap: *Practice* Side

- Busy/Work pressures
- Fear/threat to preferred ways of working
- Complexity of practice/role of context
- Unresolved bad experiences with research during training
Likely Sources of Research-Practice Gap: Research Side

- Value on simplification/experimental control/generalization
- Boring/difficult/inaccessible presentation
- Topics irrelevant to practice
  - Unrepresentative client populations
  - Manualized treatments
  - Psychodynamic, experiential, family, integrative therapies underrepresented
What Research are Therapists Interested in?

- Specific effective therapeutic processes
- Special client populations/situations
- Personality disordered clients
- Therapeutic difficulties
- Case studies
- Qualitative studies

= In general, what is specific and difficult
Research and Practice as Different Worlds

- Researchers and practitioners have different needs and live in different “worlds”
  - Even when they are the same person!
- Simplicity vs. Complexity
- Generalization vs. Context
- Reflection vs. Action

- But…
Research and Practice Can Support Each Other

1. Practice can **justify research** (introduction sections & grant proposals)
2. Practice can be a **source for research** (Stiles: Researchers “consume practice” as a source of inspiration by operationalizing and testing ideas that emerge from practice)
3. Research can **justify practice** (example: psychotherapy meta-analyses)
4. Research can **help practitioners** do a better job (apply findings, concepts, methods)
Models of Research-practice Collaboration

- Researcher as...
  - 1. **Consultant**: brought in as needed for specific technical expertise
  - 2. **Facilitator**: work with practitioners from beginning; help identify interests, methods, etc.
  - 3. **Equal partner** (dialogical model): use divergent perspectives to understand phenomenon (e.g., Elliott & Shapiro, 1992)
Training Models: Relationship between Science and Practice - 1

- **Dimensions:**
  - Separated vs. integrated
  - Producer vs. consumer
  - Favored research methods

- **1. Scientist-practitioner:** The Ur-model
  - USA: “Boulder model” (1950)
  - Both research & practice, but separated
  - May be impossible!
  - Other models are subsets of
2. Clinical scientist
   - USA academic clinical psychology
   - Researchers = producers of knowledge
   - Randomized Clinical Trials [RCTs], laboratory research

3. Evidence-based practitioner
   - Therapists as consumers of RCTs
4. Applied scientist
- UK (M. Shapiro)
- Integrated model
- Key method: single case experimental design

3. Local Clinical scientist
- USA professional schools (Treirweiler & Stricker)
- Integrated model
- Pluralist methods
Research-Practice Gap in Era of Evidence-Based Mental Health

- Latest in series of top-down solutions:
  - Empirically-validated/supported treatments
  - Evidence-Based Practice (EBP)

- Based on:
  - Randomized Clinical Trials research model
  - Therapist-as-research-consumer model

- Results have been mixed
Research-Practice Integration as a Two-way, Dialectic Process

- Success is more likely if we add a more integrative, bottom-up strategy
- Building on Mental Health Services/Therapy Effectiveness paradigm
- Existing RCT research makes space for grass-roots-based research in real world practice and training settings
- =Practice-based Evidence
Example: Practitioner Research Networks (PRNs)

- USA: Pennsylvania (Ragusea, Borkovec, Castonguay)
- UK: National Health Service CORE research team (Barkham, Evans et al.)
- Latest trend: Practice-based research in training clinics and centers (e.g., Castonguay et al.)
Practice-Based Therapy Research in Training Sites

- Training site research movement: USA, Europe
- Research on psychotherapy process/outcome is essential for understanding and improving psychotherapy practice in all orientations
- Being able to use and carry out research is an important aspect of therapist competence
- Best way to learn therapy research methods:
  - Do research during basic therapy training
  - Primary professional socialization process
  - Create habits that carry over into later practice
Principles for Practice-based Research - 1

- (1) Make research relevant to actual practice of therapy
- (2) Use methods that support therapy rather than interfere with it
- (3) Actively and continuously involve therapists in selection of research questions and methods
Principles for Practice-based Research - 2

- (4) Include inexpensive and easy-to-use instruments of key elements
  - E.g., Therapeutic alliance, client problem severity
- (5) Encourage variety of research methods
  - Qualitative & quantitative; group & single-case
- (6) Create research networks of training sites using similar, pan-theoretical instruments
Promising New Therapy Research Methods Help Bridge Research and Practice - 1

- **Systematic qualitative research methods**
  - Empirical phenomenology (Duquesne method)
  - Interpretive/hermeneutic methods
  - Discourse analysis (UK)
  - Grounded Theory Analysis (GTA)
  - Consensual Qualitative Research (QSR; Hill)

- Involve common data analytic strategies
Promising New Therapy Research
Methods - 2

- The New Case Study Movement:
  - Generic terms:
    - Systematic case study
    - Interpretive case study
  - Some brand names:
    - Pragmatic case study (Fishman)
    - Hermeneutic single case efficacy design (Elliott)
    - Adjudicated case study (Bohart)
  - Suitable for practice settings
New Case Study Approaches: Central Guiding Stance

- Alternative formulations:
  - “Disciplined inquiry” (Peterson, Fishman, Messer)
  - “Critical reflection” (Elliott)
  - ”Quasi-judicial” (Miller) or “adjudicated” (Bohart, Elliott)

- All suggest:
  - (a) careful, systematic use of method, and
  - (b) attempts to prove favored assumptions wrong
Emerging Standards of Good Systematic Case Studies

- Availability and use of complete records of treatment
  - E.g., Recordings, detailed process notes
- Use of multiple sources of data
  - E.g., Client, therapist, observer
- Use of multiple forms of measurement
  - E.g., Psychometric measures, process/content ratings, descriptive, interpretive
- Use of multiple researchers or auditors
- Systematic assessment of client, therapy outcome and process
- Grounding of conclusions in data
- Careful examination of alternative descriptions and explanations
Promising New Therapy Research Methods - 3

- **Signal Alarm Methods** (Lambert):
  - Using early outcome to identify and repair problems
  - Depends on client initial status: require more positive change for higher initial distress
  - Originally developed for Outcome Questionnaire (OQ)
  - Generic version developed by Elliott & Breighner using Reliable Change Index and multiple clinical distress bands/cutoffs
    - Extension of clinical significance methods (Jacobson & Truax, 1992)
### Draft Signal Alarm Criteria for CORE-OM

<table>
<thead>
<tr>
<th>Pretreatment Range</th>
<th>White</th>
<th>Green</th>
<th>Yellow</th>
<th>Red</th>
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</thead>
<tbody>
<tr>
<td><strong>Non-clinical/ Mild</strong></td>
<td>&lt;1.25</td>
<td>&lt;1.25</td>
<td>&gt;1.25 &amp; worse by .25 up to .5 worse</td>
<td>&gt;1.25 &amp; worse by .5+</td>
</tr>
<tr>
<td><strong>Moderate</strong> 1.25 ≤</td>
<td>&lt;1.25</td>
<td>Any better</td>
<td>No change up to .35 worse</td>
<td>White by .3</td>
</tr>
<tr>
<td><strong>Severe/ Very severe</strong> 2.5</td>
<td>&lt;1.25</td>
<td>Better by at least .25 (Session 5+: better by at least .5)</td>
<td>Better by less than .25 (Session 5+: no change better by less than .5)</td>
<td>Any worse</td>
</tr>
</tbody>
</table>
Promising New Therapy Research
Methods - 4

- New, powerful psychometric methods
  - Rasch analysis/Item Response Theory
  - Traditional psychometric methods are easy to use but ignore much valuable information, including item difficulty levels
  - Quite technical, but can produce simpler, more useful, better understood quantitative
Overview of Practical Uses of Rasch Analysis - 1

- 1. Determine number and anchoring of scale points.
- 2. Improve scale internal consistency and efficiency by dropping unnecessary scale points and misfitting items.
- 3. Identify individual respondents with inconsistent (or overly consistent) patterns of responding.
- 4. Evaluate range of discrimination within a population that measure allows. (*person separation*)
Overview of Practical Uses of Rasch Analysis - 2

- 5. Evaluate range of discrimination among items that measure allows (*item separation*)
- 6. Evaluate construct validity of measure in relation to hierarchical structure of variable
- 7. Identify measurement gaps in need of additional items
- 8. Identify sampling gaps in the need of further research
- 9. Test and refine theories about sequence, development, rank of construct
Overview of Practical Uses of Rasch Analysis - 3

- 10. Evaluate unidimensionality of measure
- 11. Equate different instruments measuring the same concept
Promising New Therapy Research Methods - 5

- Virtual communities/web-based resources
  - May be open: www.experiential-researchers.org
  - Or closed (by invitation): e.g., www.communityzero.com/ipeppt
  - Foster collaboration, overcome isolation
  - Repositories for instruments, research protocols
  - Exchange information
  - Collect and store data
Bridging Research and Practice: Conclusion

- Research and practice constitute different worlds
- Strategies and developments described can help transform this situation from a problem to a resource
- Treat situation not as a deficiency but as a creative tension, or a constructive dialectic