

# **An intensive process-outcome study of the interpersonal aspects of psychotherapy**

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## **Introduction and background**

Randomized controlled trials (RCT) have convincingly documented the efficacy of psychotherapy in the treatment of clients with various diagnoses and problems of life (Roth & Fonagy, 2005). RCT designs have thus played a significant role in establishing the efficacy of psychotherapy. However, treatment package/methods in RCT designs explain surprisingly little comparative outcome variance (Wampold, 2001; Wampold & Brown, 2005), while different aspects of psychotherapy process are consistently and convincingly associated with therapy outcome. These associations are demonstrated in both carefully controlled studies and in naturalistic studies (Orlinsky, Rønnestad, & Willutzki, 2004). We do not know the relative contribution of therapist effects and methods effects to the outcome of psychotherapy, as some studies have shown no therapist effects in RCT trials (e.g. Elkin, Falconnier, Martinovich, & Mahoney, 2006.), while others have shown rather substantial therapist effects (Blatt, Zuroff, Quinlan & Pilkonis, Lutz, 2006; Kim, Wampold & Bolt, 2006). Substantial controversies regarding the most appropriate statistical procedures to use need to be resolved in order to come to agreement on this important issue. However, there is agreement that therapist effects are best investigated in naturalistic studies (Crits-Christoph & Gallopp, 2006; Elkin, 2006, Wampold, 2006). Furthermore, successful therapies of various orientations are described similarly by clients, suggesting that there are some common elements in successful therapies (Lambert & Ogles, 2004).

Analyses of studies published during the last 50 years, including almost 300 empirical process-outcome studies (controlled and naturalistic) published during the last 10 years, have demonstrated that the most consistent association between process and outcome are found for the *interpersonal aspect of process* (Orlinsky, Rønnestad, & Willutzki, 2004). The interpersonal aspect of therapy is most commonly conceptualized as the working alliance and most frequently operationalized as either the Pennsylvania scales (HAcS, HAR, Haq), the Vanderbilt scales (VPPS, VTAS), the Toronto Scales (TARS), the California scales (CALPAS, CALTARS), or the Working Alliance Inventory (WAI). The general picture is that well accepted alliance scales predict outcome similarly (Fenton, Cecero, Nich, Frankforter and Carroll (2001), although they vary in theoretical foundation and sophistication. Global alliance or the dyadic equivalent of positive group cohesion has been investigated in relation to

outcome in more than 100 studies published in between 1950 and 2002, of which 53 studies since 1992. “Collectively, and from four current meta-analytic reviews, it is clear that global alliance and group cohesion are quite consistently (though not invariably) associated with positive outcome in psychotherapy. Indeed, few findings in this or related fields seem better or more robustly documented “ (Orlinsky, Rønnestad, & Willutzki, 2004, p. 345). In the meta-analysis conducted by Martin et al. (2000) data from 79 studies (58 published, 21 unpublished) which “indicated that the overall relation of therapeutic alliance with outcome [in and of itself] is moderate, but consistent ...[and that]... the relation of alliance and outcome does not appear to be influenced by other moderator variables...” (p. 438). In an earlier meta-analysis of Horvath & Symonds (1991) the average effect size (correlations coefficient) between alliance and outcome was .26. In the Martin et al. (2000) study, the average correlation for the 24 studies was .22. Correlations between alliance measures and measures of outcome are generally reported to be in the range of .20 to .30 (Pearson r).

It has been argued that alliance is merely the consequence of effects that have already taken place (Crits-Christoph, Gibbons, Crits-Christoph, Narducci, Schamberger & Gallopp, 2006). It is, however, documented that alliance predicts outcome, controlling for improvement up to the point of alliance measurement (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000). “These findings suggest that alliance might have a direct effect on outcome as opposed to simply being a consequence of improvements that have already occurred because of a positive attitude toward treatment and the therapist” (Crits-Christoph et al., 2006, p. 269). We may ask what is the pragmatic usefulness of such general findings? Effect sizes on the effectiveness and efficacy of psychotherapy vary some, but are surprisingly often in between .65 and .75 (Cohen), which means that the majority of clients are improving while still substantial proportions of clients are not getting the help they need. (See Wampold, 2001, for tables of transformations of effect sizes in different formats).

Also, except for a limited perspective of client diagnosis (e.g. borderline and obsessive compulsive disorders) we know little about the disturbing fact that 5-10 % of clients in psychotherapy demonstrate deterioration in functioning at the end of therapy (Lambert & Ogles, 2004), and that substantial proportions of clients seeking out-patient treatment drop out of therapy prematurely. In the meta-analysis of 125 studies by Wierzbicki and Pekarik (1993), the average dropout-rate was almost 50 %. RCT-designed research has not proven appropriate to explore these important issues.

A promising line of research to improve the general effectiveness and efficacy of psychotherapy and to reduce dropout is to focus on the investigation of alliance formation and repair of alliance ruptures. Muran et al, (1994) suggested early that detailed analyses of client-therapist interactions may provide specific and transferable knowledge on the formation and repair of working alliances. This line of research is framed within a modern paradigm which investigates patterns and the temporal sequencing of alliance experiences. Recent examples of within this paradigm is the work by Kivlighan and Shaughnessy (2000) who differentiated between stable alliance, linear alliance growth, quadratic alliance growth (curvilinear U-shaped) and found that the pattern of quadratic growth pattern was associated with most counselling benefit.

The work by Stiles and associates (2004) in a replication and extension of the study by Kivlighan and Shaughnessy (2000), differentiated four distinctive patterns of alliance development across sessions, two of which matched the above study. They did not replicate the U-shaped pattern, and found no main effect differences for patterns. However, they identified a subset of 17 clients (of a total of 79) who experienced rupture-repair sequences as a similar V-shaped deflection, thus documenting partial support for the possible impact of patterning for outcome. The preliminary findings of both studies above are thus moderately, but not

convincingly consistent with the hypothesis formulated by Agnew and associates (1994), Safran and associates (1990), Safran & Muran (1996, 2000) and Samtag and associates (2004) that the experience of alliance ruptures followed by alliance repair provide opportunities for clients to learn about problems in how they relate to others (ref. in Stiles et al., 2004).

However, alliance only predicts about 5 % of outcome variance, thus leaving substantial outcome variance unexplained. A temporal/patterning approach as it is carried out until now may increase this some, but likely not much. We are suggesting that we can understand the change process better and explain more outcome variance with data collections which 1) allows for larger differentiations in the temporal organization of analysis, 2) which ensures the measurement of process from different perspectives (patient, therapist., external raters), and 3) which ensures the registration of participants' continual experiences during therapy.

Implications of the first point is to collect data which allows for both micro-analysis of sessions and the more temporally extended perspective of therapy phases. An example of the first point (on micro-process) is the recent work by Lippe, Monsen, Rønnestad & Eilertsen (2006) where Client-therapist interactions were studied in 14 positive change (PC) and 14 negative or non-change (NC) therapies using SASB observer based interpersonal codings and analysing sessions 3, 12 and 20. First-lag sequence analyses of SASB codings showed the following significant differences: Rejection of therapist interventions predicted negative outcome, and this resistance escalated with time in the NC group. Hostile complementarity (regardless of who initiated the interaction) characterized the NC group, peaking in the 12<sup>th</sup> session. The PC group had a more helping and trusting focus, which also increased during the in-sessions, while complementary hostility remained low. Hostile complementarity was relatively rare, however, i.e. therapists more often met client hostility in non-hostile ways, pointing to the detrimental effect of even a few open or subtle critical or ignoring therapist statements when clients invite hostility. This study suggests that client's responsiveness characterized by rejection of therapist effort to help and increase in complementary hostility during the early hours of therapy predict therapeutic failure. Rejection of therapist helpfulness may make therapists especially vulnerable to own hostility. One research implication of this study is to investigate the degree to which expert therapists are able to resist "the pull of hostility", and if so, how they do it.

The second point (observations from different perspectives) is now a general requirement in psychotherapy research. The rationale for the third point (the registration of participants' experiences continually) is the documentation that it is the *patients* assessment of therapy that predicts outcome best, and that patients' experience of the *meaningfulness* of therapy is crucial for constructive processes and favourable therapy outcomes. Lamberts thrust to ensure feedback from client after every therapy session to monitor patient progression/deterioration (e.g. Lambert, & Ogles, 2004) is a valuable contribution to the quality of health care and to research. However, the approach lacks the assessment of the experiential quality of patient experience necessary to understand the change process.

To study the impact of psychotherapy *training* on psychotherapy outcome is challenging (Rønnestad & Ladany, 2006). So is the related study of the impact of psychotherapist *experience* to outcome. From limited and often methodologically flawed research (i.e. problems of internal validity, definition of experience and statistical power; see Nietzel & Fisher, 1981), conclusions on the relationship of therapist experience to outcome are inconclusive (Lambert & Ogles, 2004). Older research showed grossly inconsistent results, while it seems that better controlled research favored therapist experience moderately (e.g. Huppert, Bufka, Barlow, Gorman, Shear, & Woods, 2001). Recent research suggests that experienced therapists are more flexible in how they react to clients (ibid.). Further study of highly reputable and experienced

therapists may thus provide knowledge of variations in responsiveness to clients in general, and specifically provide knowledge of how to form alliances and resist counter-therapeutic reactions to consistent critical, non-affirming and self-devaluating client expressions. The research suggested in this proposal can do that.

### **The project**

The proposed psychotherapy process-outcome study has two general objectives:

- a) to advance the field's understanding of the interpersonal processes of change in the psychotherapy with clients seeking help in an out-patient setting, and specifically contribute to the understanding of alliance formation, alliance maintenance, alliance rupture and alliance repair.
- b) to establishing and develop a database for process-outcome research.

There are five essential components in this research:

1. focus on *interpersonal process*;
2. the collection of *continuous data* (i.e. from each therapy session);
3. collection of continuous data from *multiple perspectives*, i.e. *both* from patient and therapist after each session, and digital recordings making external observation possible;
4. the combination of *qualitative and quantitative data*;
5. the study of *expert therapists*.

These five components in combination will enable the in-depth analyses of the interpersonal processes associated with different therapy outcomes.

Data will be organized and stored to make possible the study of the interior connection between standardized and quantifiable measurements on the one hand and ideographic and qualitative recordings on the other hand.

In addition to focus on alliance formation, maintenance, rupture and repair, there will also be a study of significant (positive and negative) change events and critical incidences.

The methodological focus will seek to supplement and expand on common knowledge of group designs, and develop an expertise in practice based research, expertise transferable to practicing clinicians. The pragmatic/heuristic focus, establishing a data-base for psychotherapy process-outcome research will constitute a foundation for the refinement of expertise in single case design, and will--in an extended time perspective--provide a vehicle for separating methods and therapist effects by including several clients for each therapist. A unique feature of this project is the application of and commitment among researchers to in depth qualitative analyses of psychotherapy process and learning process.

Also, through the contribution of professor and scientific director Robert Elliott (see attachment/statement of contribution), we have the opportunity to collaborate with the International Project on the Effectiveness of Psychotherapy and Psychotherapy Training (IPEPPT), a large scale European project (Steering Committee of the IPEPPT: Robert Elliott U.of Toledo & Leuven U., Alberto Zucconi, U. of Siena; David Orlinsky, U. of Chicago; Franz Caspar, U. of Geneva; Louis Castonguay, Penn State U.; Glenys Parry. U. of Sheffield; and Bernhard Strauss, Friedrich Schiller U. of Jena-Germany).

### **More specific information and research question:**

As presented in the introductory section of the application, a rationale for the study is the need for empirically based knowledge on the formation and maintenance of therapy alliance, alliance rupture repair, constructive resolution of conflicts in therapy, and constructive interactions in significant events or episodes.

#### To main research questions are:

1. How do expert psychotherapists establish and maintain working alliances and repair alliance ruptures in the therapeutic work with adult clients seeking psychotherapy in outpatient settings?
2. What is the relationship of clients' post-session retrospective assessment of therapy session to other processes (e.g. alliance) and outcome of psychotherapy?

#### Method:

*Therapists:* Approximately 15 expert therapists as defined in this project are therapists who are either senior academic staff, and are teaching and publishing on psychotherapy in the Department of Psychology, University of Oslo and who also have an independent practice, or experienced psychotherapists associated with the Psych. Department or other training institutions in the capacity of supervisors and psychotherapy teachers. In other words, expertise is defined as a combination of extensive clinical experience and the theoretical and reflective competence assumed developed through academic activities. Each therapist will have a minimum of three clients.

*Therapy:* Naturalistic therapies of different theoretical orientations, and of various durations.

*Clients:* Clients in the experts' practice. One will ensure that sufficient number of clients with personality disorders are included in the client sample to ensure variation in psychopathology and ensure a sufficient number of clients that are typically considered 'difficult to treat'. Exclusion criteria are: psychosis, primary drug diagnosis, known neuropsychological damage and age below 18. A shared system of referrals and allocation of clients will be established.

*Protocol:* The chosen protocol structure reflects measurement domains common in contemporary psychotherapy research (Elliott, 2005a), i.e. *Common therapy outcome* (e.g. quantitative improvement in general distress over problems/symptoms, retrospective qualitative view of change, progress on individualized problems/goals, interpersonal/life functioning improvement, well-being/quality of life/life satisfaction improvement), *Therapy process* (e.g. therapeutic alliance, client open-ended perception of helpful aspects or events in therapy, client perception of session value), and *Client/Therapist pre-therapy background* (e.g. basic descriptive characteristics, client clinical problems/diagnosis--e.g., self-report inventory psychopathology measures, SCID, client psychiatric medications (e.g., medications, including dose, condition treated, when last changed), and client social support).

*Intake/pretherapy:* Therapist characteristics: *Psychotherapists' Work Involvement Scales* and *Psychotherapists' Development Scales* (Orlinsky & Rønnestad, 2005). Adult client characteristics assessed by independent researcher/clinician and client: General client background information, SCID Axis I, II and V; IIP-64 (Horowitz et al., 1988), Outcome questionnaire 45 (OQ-45) (Lambert et al., 1996).

*Assessment after every session:* Modified version of Helpful Aspects of Therapy (HAT) (Llewelyn, 1988; R. Elliott, 2001), filled out by client and patient. Three obligatory questions are answered by therapist and client after each session.

*Assessment at 3<sup>rd</sup>, 6<sup>th</sup>, 12<sup>th</sup>, 20<sup>th</sup> and thereafter every 20 session:* The IIP-64 and OQ-45 filled out by client, and the Working Alliance Inventory-12 (Hatcher & Gillaspay (2006). The Hatcher and Gillaspay factor analysis solution is used to benefit from the improved distinction between the “task” and “bond” aspects of the working alliance that this solution provides.

*Post-therapy and Follow up at 1 and 3 years:* IIP-64 (Horowitz et al., 1988), Outcome questionnaire 45 (OQ-45) (Lambert et al., 1997).

*Analyses:* The analytical pathways are not all designed in advance. Rather, they will be explored when the researchers in each study will direct themselves from the standardized measurements as indicators to actual selection of cases and sessions. It is the observed variation - preferably contrasts - in some measures that will be used strategically as guidance in the inductive phase. Subsequently, these and other measures will be used to direct the researcher to similar and comparable cases and sessions in the confirmative phase of the analyses. The analyses will all be conducted in ways that start out with existing knowledge of relationships, and contribute with answers to the questions about dynamics and mechanisms. The general move is then, from questions about what matters to the questions about how this matters and why that is so.

### **The Research Group, Principal Researchers and Collaborating Partners**

The participating researchers, all academic staff at the Department of Psychology, U. of Oslo, are experienced clinical researchers and clinical authors (see previously sent curriculum vitas). A special feature of the project is the commitment among the researchers to in depth qualitative analyses of psychotherapy process and learning process. Also, the majority of the participating researchers will contribute to the project as expert psychotherapists. The group has considerable expertise in quantitative and qualitative research and a shared ambition in developing sustainable analytical procedures within a mixed methods design. Together the principal researchers act as thesis supervisors to 18 PhD candidates. Some of these candidates will in their research projects relate to the research questions and analytical procedures that are addressed in this application.

The project director, professor Michael Helge Rønnestad, has published extensively on the professional development of the psychotherapist (see curriculum vita), is European coordinator of CRN (see below), is coauthor (with Orlinsky & Willutzki) on the chapter on process-outcome research in the recent Bergin and Garfield's Handbook of Psychotherapy and Psychotherapy Research (2004) (Editor: Mike Lambert). He has long experience in the teaching of psychotherapy research.

The scientific advisors, David E. Orlinsky (U. Chicago), Robert Elliott (U. Toledo), Mike Lambert (Brigham Young U) (who has served in the capacity of external consultant) and Bruce Wampold (U. Michigan) are all outstanding contributors to psychotherapy research. Orlinsky, Elliott and Lambert are past or present presidents of the Society for Psychotherapy Research.

With professor Bruce Wampold (U. of Wisconsin), professor Robert Elliott (U. of Toledo), and scientific director of The International Study of the International Project on the Effectiveness of Psychotherapy and Psychotherapy Training (IPEPPT), and Mike Lambert (Brigham Young U.) as scientific advisors to the project, the research group can draw on sophisticated expertise in quantitative and qualitative data-analyses. Wampold and Elliott have contributed to the design of this project in visits to the U. of Oslo Fall of 2005. Consultation and collaboration with this expertise have ensured that selection of instruments meets the standard and requirements for publication in the most prestigious journals.

There will also be collaboration with the International Study of the Development of Psychotherapists (ISDP), which is carried out by the Collaborative Research Network, a subgroup within the Society for Psychotherapy Research. Coordinators within the CRN is Rønnestad (European

coordinator) and professor David Orlinsky, U. of Chicago (coordinator for the USA and elsewhere) (See statement of collaboration in attachment). The CRN is an active research collaboration with survey-data from more than 7000 psychotherapists of various professions and theoretical orientations from more than 30 countries. In Norway, data is already collected from approximately 1500 psychotherapists.

### **Research Staff**

The psychotherapy research program will need technical management and a post-doctoral fellow for its progress. The application asks for NOK 1.000.000 per year for three years covering one full time post-doc position and a part-time project management position in addition to a small additional amount for research services.

### **Research Ethics**

Applications will be sent to two ethical boards for scientific research, The Norwegian Data Service and the Regional Ethics committee for Medicine for approval. In addition, the universities will be consulted on ethical and legal aspects of the project.

### **Feasibility**

The project has strong support from the Department of Psychology. The project is anchored within one of the core research areas (Psychotherapy research and psychotherapist development) within the Department of Psychology, University of Oslo. Meetings with potential therapists have enlisted considerable enthusiasm for the project and guaranteed therapist participation, which also attests the ecological validity of the project.

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