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**“Contribution of the
therapeutic bond, therapist
interventions and their
interaction to outcome
in psychotherapy”**

Thesis for the degree of Philosophiae Doctor

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Norwegian University of Science and Technology
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Department of Psychology



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Summary

Empirical research has established that both individual and group psychotherapy is effective for a broad range of psychiatric disorders, but less is known about the processes associated with positive treatment outcomes. The aim of the present thesis was to examine the individual and combined contribution of two essential aspects of the Generic Model of Psychotherapy to outcome, namely the therapeutic bond (therapeutic alliance; group climate) and therapist interventions (homework assignments; transference work). Data was taken from two previously published randomized controlled trials. The first trial examined the effectiveness of cognitive behavioral group therapy (CBGT) for patients with comorbid disorders, whereas the second trial examined the effectiveness of short-term dynamic psychotherapy (STDP) and cognitive therapy (CT) for patients with cluster C personality disorders. Paper I found support for the use of a trans-theoretical measure of group climate as a predictor of long-term follow-up outcome in CBGT for comorbid disorders, particularly the dimension of engagement. In paper II, early ratings of therapist competence in assigning homework was found to predict both mid- and post treatment outcomes in CT with cluster C personality disorders. The use of homework assignments was not observable in STDP. This finding emphasizes the quality of homework assignments as an important and measurable therapist skill essential for treatment outcome, at least in CT. Paper III reported that a stronger emphasis on transference work, especially in the context of a weak therapeutic alliance, was associated with a smaller reduction in interpersonal problems at treatment termination in STDP and CT with cluster C personality disorders. The findings demonstrate the “risks” involved in having a stronger emphasis on transference work, especially in the context of a weak therapeutic alliance early in treatment. The results add to the importance of examining the contribution of the therapeutic bond, therapist interventions and their interaction to outcome in psychotherapy, and have noteworthy clinical implications for practicing therapists.

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List of papers included in the thesis

The thesis is composed of three articles referred to by their Roman Numerals.

I. Ryum, T., Hagen, R., Nordahl, H. M., Vogel, P. A. & Stiles, T. C. (2009). Perceived group climate as a predictor of long-term outcome in a randomized controlled trial of cognitive-behavioral group therapy for patients with comorbid psychiatric disorders. *Behavioural and Cognitive Psychotherapy*, 37, 497 - 510.

II. Ryum, T., Stiles, T. C., Svartberg, M., & McCullough, L. (2010). The effects of therapist competence in assigning homework in cognitive therapy with cluster C personality disorders: Results from a randomized controlled trial. *Cognitive and Behavioral Practice*, 17, 283 - 289.

III. Ryum, T., Stiles, T. C., Svartberg, M., & McCullough, L. (2010). The role of transference work, the therapeutic alliance and their interaction in reducing interpersonal problems among psychotherapy patients with cluster C personality disorder. *Psychotherapy: Theory, Research, Practice, Training*, 47, 442 - 453.

1.0 Introduction

More than sixty years of outcome research has documented that psychotherapy is effective for a broad range of psychological disorders (see Lambert & Ogles, 2004 for a recent review). For example, meta-analyses have reported cognitive-behavioral therapy to be effective with common Axis I disorders such as depression (Dobson, 1989; Gloaguen, Cottraux, Cucherat & Blackburn, 1998) and anxiety disorders (Hofman & Smits, 2008; Gould, Otto & Pollack, 1995; Gould, Otto, Pollack & Yap, 1997; Taylor, 1996). A recent literature review concludes that group therapy in general produce similar effects as those reported in individual therapy (Burlingame, MacKenzie & Strauss, 2004), although to what extent this might mask differential effects for specific treatments and patient populations continues to be an area of debate (McRoberts, Burlingame & Hoag, 1998). Research on Axis II disorders in general is more limited compared to Axis I disorders, but there is evidence that both short-term dynamic psychotherapy and cognitive therapy are effective in the treatment of patients with cluster C personality disorders (Emmelkamp, Benner, Kuipers, Feiertag, Koster & Apeldoorn, 2006; Svartberg, Stiles & Seltzer, 2004; Winston, Laikin, Pollack, Samstag, McCullough & Muran, 1994).

Outcome studies are crucial in the process of identifying empirically supported or validated treatments (Chambless & Hollon, 1998). Needless to say, documenting that a treatment procedure or package –psychological or medical, *works* for a particular problem or diagnosis, is essential. However, this does not inform researchers or therapists on the *how*, *why and under what conditions* positive change occurs, so research aimed at identifying the so-called ‘active ingredients’ in psychotherapy is the natural companion to outcome research. The brief answer to the question of why psychotherapy works is the following: *It's the process, stupid!* However, with the recognition that ‘process’ may include all interactions

experienced by patient and therapist, or observed by others, during therapy sessions (Orlinsky, Rønnestad & Willutzki, 2004), this first answer is not very informative. Clearly, to arrive at a more sophisticated understanding of the factors or processes associated with positive therapeutic change, it is essential to be far more specific.

A considerable body of research has accumulated linking process to outcome in psychotherapy during the last 50 years. In the following, the role of specific- and common factors as separate groups of process-factors in psychotherapy will be discussed, before arriving at the Generic Model of Psychotherapy (Orlinsky & Howard, 1987) as an overarching conceptual system or meta-theory for integrating research findings from various theoretical approaches.

1.1 Specific and common factors

The majority of process research in psychotherapy has been conducted on cognitive-behavioral, humanistic/ experiential and psychodynamic oriented therapies – treatments that clearly require patients to undergo different experiences and to engage in different behaviors. However, since the first outcome meta-reviews appeared in the 70s (e.g., Luborsky, Singer & Luborsky, 1975), claims have repeatedly been made that there are - in general (with some notable exceptions), small or non-significant differences between treatment approaches in terms of outcome (see Lambert & Ogles, 2004 for a recent review). This has paved the way for the heavily debated topic of whether outcome largely is related to factors specific to one treatment approach, or common to most. *Specific* refers to benefits produced by specific ingredients in a specific treatment (e.g., interpretations in dynamic therapies; in vivo exposure in behavioral therapies), whereas *common* refers to the benefits produced by more incidental aspects of a treatment (e.g., therapeutic alliance; expectancy) (Wampold, 2001).

Specific factors have traditionally been conceptualized as measurable specific ingredients, which are emphasized as essential for change by proponents of a particular treatment model. Typically, specific factors have been equated with the use of theoretically derived technical interventions, whose impact on outcome is conceptualized as distinct from that of common factors (the therapeutic alliance; expectancy beliefs; group climate in group therapy) with non-specific or general effects. The inclusion of specific factors is thus hypothesized to be crucial for beneficial treatment outcomes, with observable effects that can be reliably measured. However, the cumulative empirical evidence demonstrating specific factors to have *unique* effects is very limited, as evidenced in both comparative meta-analytical reviews (e.g., Lambert & Ogles, 2004; Benish, Imel & Wampold, 2007) and component studies (e.g., Ahn & Wampold, 2001; Jacobson, Dobson, Truax, Addis, Koerner et al., 1996). The most notable exception is evidence demonstrating treatments that include exposure to have better treatment outcomes (i.e., unique effects) with anxiety disorders such as phobia, obsessive-compulsive disorder, panic and generalized anxiety disorder compared to other treatments (Lambert & Ogles, 2004). However, this is hardly a new finding, and was noted already in an early review of Luborsky and colleagues (Luborsky et al., 1975).

The idea that common factors largely are responsible for the beneficial effects of psychotherapy was first suggested by Rosenzweig (1936) in a now seminal article. Albeit unaware of later meta-analytic reviews, demonstrating mostly small or non-significant differences between treatment approaches in clinical trials (Lambert & Ogles, 2004), he nevertheless suggested that the relationship between patient and therapist was an essential ‘common factor’. In addition, he saw the providing of a rationale or believable explanation as important for a positive patient response. Rogers (1957) significantly extended this by highlighting what he saw as the necessary and sufficient therapist-delivered qualities for a

successful therapeutic relationship to develop, namely the providing of sufficient empathy, congruence and non-possessional warmth.

These and related ideas were later elaborated and formalized even further by Frank (1961) and Frank & Frank (1991), who identified four core features shared by all effective treatments: (a) “an emotionally charged, confiding relationship with a helping person”, (b) “a healing setting”, (c) “a rationale, conceptual scheme or myth that provides a plausible explanation for the patient’s symptoms and prescribes a ritual or procedure for resolving them”, and (d) “a ritual or procedure that requires the active participation of both patient and therapist and that is believed by both to be a means of restoring the patient’s health” (Frank & Frank, 1991, pp. 40-43). This illustrates clearly that what may be considered common across treatments extends far beyond the old dichotomy of whether the use of technique or the therapeutic relationship is the primary vehicle of change in psychotherapy. Various conceptualizations of the common factors have been proposed in recent years, encompassing technical-, interpersonal-, intrapersonal- and structural factors (e.g., Castonguay, 1993; Oei & Shuttlewood, 1996; Weinberger, 1995).

A seminal development in the common-factors approach in recent years has been the operationalization of many of the common factors, which are now measurable with psychometrically sound scales (see Norcross, 2011 for a recent review). This stands in distinct contrast to earlier writers, who tended to equate ‘common’ with ‘ill-defined’ or ‘unspecific’ (e.g., Garfield, 1973; Bergin & Lambert, 1978; Frank, 1961). It could thus be argued that many common factors should be considered ‘specific’ in the sense that their impact on process and outcome in psychotherapy is well established, although they by definition produce general effects (i.e., they are incidental and do not produce *unique* effects). However, while the advocacy of common factors admittedly has much merit, one inherent difficulty is

that it is difficult to envisage how common factors may be applied and be of therapeutic value without reference to the use of specific factors. For example, a patient's experience of the therapist as empathic (a common factor) is dependent upon the specific behaviours or interventions that the therapist utilizes. Common factors thus often reflect the patient's *experience* of the therapeutic endeavour, whereas specific factors typically refer to *therapist behaviours or interventions*.

Although treatment approaches such as CT and STDP do require patients to undergo different experiences and engage in different behaviours, it is nonetheless important to note some technical similarities between these two treatments. For example, the use of transference interpretations, which usually is associated with psychodynamically-oriented therapies, has been found to be observable in other therapies as well, including cognitive-behavioral therapy (Gibbons, Crits-Christoph, Levinson, Gladis, Siqueland, Barber & Elkin, 2002). Similarly, the use of homework assignment, which traditionally has been the hallmark of cognitive-behavioural therapies, has been reported to be highly common in routine clinical practice of therapists from various schools (Kazantzis, Lampropoulos & Deane, 2005), even to such an extent that it has been suggested to consider this as yet another common factor (Kazantzis & Ronan, 2006). This indicates that there may be some technical 'drift' between treatment approaches such as CT and STDP, although this probably is more pronounced in routine clinical practice compared to randomized controlled trials.

The relative merits of specific- and common factors in psychotherapy have been heavily debated on both theoretical and empirical grounds for several decades, separating clinicians and researchers into two camps – each confident that they know how and why psychotherapy works (Wampold, 2001). However, it is important to recognize that specific- and common factors are not mutually exclusive, and perhaps more than anything else

represents different perspectives or lenses through which one can observe and evaluate process in psychotherapy. Specific and common factors probably influence and interact with each other in a complex manner (Butler & Strupp, 1986; Safran & Segal, 1990), and as noted - it is hard to conceptualize how one factor may be applied without the other. Since common factors are assumed to be inclusive to all bona fide psychotherapies (Wampold, 2001), the logical solution from a practical point of view is to choose a treatment approach that already has proven efficacy for a specific disorder or diagnosis. Adopting a so-called ‘common factors approach’ (eschewing the use of technique at the extreme) ironically runs the risk of becoming yet another treatment model.

While the terms ‘specific’ and ‘common’ do add conceptual clarity for understanding process in psychotherapy, these terms may not suffice for a thorough conceptualization. The terms ‘specific’ and ‘common’ do not capture well how the psychotherapy process unfolds during treatment. As already noted, ‘common’ may refer to various aspects of the psychotherapy process (structural, relational, interpersonal, technical), and although Wampold (2001) suggested that ‘specific’ should refer to *unique* effects produced by a treatment approach, a more liberal use of the word would be to refer to theoretically derived technical interventions as specific factors. To add conceptual clarity, it thus appears essential to utilize a more formal model to conceptualize the various factors in process-research. This is found in the Generic Model of Psychotherapy, which is discussed in the following.

1.2 The Generic Model of Psychotherapy

An informative trans- theoretical (or meta-) model for integrating findings from process research is found in Orlinsky and Howards (1987) “Generic Model of Psychotherapy” (GMP). Aiming at consolidating research findings from hundreds of studies into a coherent body of

knowledge, the model proposes that process in psychotherapy can be broken down into the following six categories: (1) *Therapeutic contract* (e.g., the organizational aspects of therapy; participants' roles as patient and therapist; therapeutic situation or frame as determined by the therapist's treatment model); (2) *Therapeutic operations* (e.g., the technical aspects of therapy; the cycle of reciprocal role-specific behaviors performed by the participants in therapy, including (but not limited to) therapist's interventions); (3) *Therapeutic bond* (e.g., the interpersonal aspect of therapy; the quality of involvement between the particular persons who occupy the normatively specified roles of patient and therapist); (4) participants *Self-relatedness* (e.g., the intrapersonal aspect of therapy; each participant's experience of self concurrent with enacting the roles of patient and the therapist and relating to one another as persons); (5) *In-session impacts* (e.g., the clinical aspects of therapy; immediate positive impacts on the participants of their interactions during the therapy session); and (6) *Temporal patterns* (e.g., the sequential aspects of process; distinctive characteristics and sequelae of events or moments in session development (Orlinsky & Howard, 1987; Orlinsky et al., 2004).

According to the GMP, each therapy approach always involves a particular configuration of these six process facets. More specifically, a therapeutic contract is always negotiated between the participants, which include specific therapeutic operations to be performed by both participants, all the while as a therapeutic bond of some kind and quality develops between the participants. Moreover, the participants experience specific modes of self-relatedness, through which they attain some positive or negative in-session impacts. All these facets, in turn, interact and over time develop together as a temporal pattern of events (Orlinsky et al., 2004). As is evident, the model captures both specific and common factors in psychotherapy approaches, but classifies them according to a more informative conceptual scheme that more fully represents the psychotherapy process. Although the model

theoretically separates out distinct classes of factors, and presents a formal framework for integrating research findings, it is important to note that it is *not* a separate treatment model.

The GMP adds conceptual clarity in discussing the so-called “dodo-bird” finding from outcome research (i.e., equivalence in outcome; see Rosenzweig, 1936; Lambert & Ogles, 2004). For example, the therapeutic bond and the use of technical interventions represent different *perspectives* on the psychotherapy process. The quality of the therapeutic bond addresses patients’ subjective *experience* of the treatment process, whereas the technical interventions comprise *behaviours performed by therapists*. Equivalence in outcome may be due to different treatments (e.g., STDP; CT) utilizing divergent techniques, that achieves a similarity in outcome through different processes. However, another possibility is that the use of different techniques achieves a similarity in outcome, based on their influence on the same underlying change-process (es) or in-session impacts in patients, as suggested in some recent research (e.g., McCullough et al., 1991; Valen, Ryum, Svartberg, Stiles & McCullough, 2011; Ryum, Valen, Stiles, Svartberg & McCullough, 2011).

For the field to arrive at a comprehensive understanding of the psychotherapy process, it is essential to examine the influence of all groups of factors included in the GMP on outcome – both individually and in interaction with each other. However, since process-research is a rather laborious and time-consuming enterprise, it typically focuses on one or two group of factors. In the following, two groups of factors in the GMP are discussed; first, the therapeutic bond (therapeutic alliance; group climate), and secondly the use of therapist interventions (homework assignments; transference work) as an instance of the category of therapeutic operations.

1.3 Therapeutic bond: therapeutic alliance and group climate

The Generic Model of Psychotherapy (Orlinsky and Howard, 1987) proposes that an essential feature of the therapeutic process is the therapeutic relationship between therapist and patient, also referred to as the *therapeutic bond*. However different psychotherapy approaches may appear, they all involve a human, and potentially healing, relationship between a patient and a therapist. This common factor is often operationalized as the *therapeutic alliance* in individual therapy, and as cohesion or *group climate* in group therapy. The following discusses these constructs separately.

Therapeutic alliance

Freud (1912) was originally the first to evoke the concept of the therapeutic alliance in his writings, and a steady flow of later revisions and developments have come from mostly dynamically oriented writers (e.g., Bordin, 1979; Fennichel, 1941; Greenson, 1965; Sterba, 1929; Zetzel, 1956). Numerous and sometimes overlapping definitions of the alliance have been given (“therapeutic alliance”, “helping alliance”, “working alliance”, “therapeutic bond”). Attempts have been made to disentangle, theoretically, between constructs such as the therapeutic alliance, on the one hand, and related relationship constructs such as transference / counter-transference and the “real” relationship, on the other hand (Gelso & Carter, 1994). In recent years, Bordin (1979) has been credited for popularizing the alliance construct in pan-theoretical terms, emphasizing the alliance as a collaborative enterprise between therapist and patient, consisting of an emotional bond as well as an agreement on the tasks and goals of therapy.

Essentially, the therapeutic alliance captures the quality (i.e., emotional bonding; rapport) as well as the purposiveness (i.e., agreement on goals and tasks) of the therapeutic enterprise. The alliance-construct is related, but not identical, to other relational variables such

as those stemming from the humanistic-experiential tradition, namely empathy, warmth and congruence. However, these latter constructs are to a larger extent seen as therapist-delivered qualities, whereas the therapeutic alliance is conceptualized as a collaborative patient-therapist enterprise (i.e., dyad). Moreover, the “real” or “authentic” dimension of the interpersonal encounter is emphasized as essential in *all* human relationships, and not uniquely so for the therapist-patient relationship, according to the humanistic-experiential tradition. The therapeutic alliance, on the other hand, is seen as existing for the purposiveness of therapy. Transference- and counter-transference phenomena may both influence the therapeutic alliance, but are not conceptualized as part of the therapeutic alliance (Gelso & Carter, 1994).

There is general agreement that the therapeutic alliance defines aspects of the treatment process that are essential for, yet clearly differentiated from, outcome across treatment orientations (Norcross, 2011). However, controversy still persists as to whether the alliance should be conceptualized as a necessary *and* sufficient factor in therapy (causal agent; similar but not identical to Rogers core conditions), or only as a necessary prerequisite for the use of other techniques (like the use of anesthesia in medicine). Humanistic/ experiential- and psychodynamically oriented therapies have tended to emphasize the therapeutic alliance as a curative factor in therapy (utilizing the patient-therapist relationship as a vehicle of change), whereas behavioral- and cognitive therapies typically have conceptualized the therapeutic alliance as a necessary but not sufficient factor for positive treatment outcomes (e.g., Beck, 1976). However, recent developments suggests an increased interest in the therapeutic alliance (as well as the therapeutic relationship more generally) in cognitive-behavioral therapies (Berge, Repål, Ryum & Samoilow, 2008; Gilbert & Leahy, 2007; Safran & Segal, 1990; Young, 1994).

Empirical research on the association between the quality of the therapeutic alliance and outcome in individual therapy has mostly produced positive results, as demonstrated in meta-analytic reviews (Horvath & Symonds, 1991; Martin, Garske & Davis, 2000). The average effect-size correlation has been found to be $r = .22 - .26$. Early ratings of the therapeutic alliance (sessions 3-5) typically predicts outcome better compared to later ratings, and patients' own ratings outperforms therapists' and observer raters' judgements (Horvath & Bedi, 2002). Moreover, despite diverging theoretical conceptualizations of the therapeutic alliance across treatment orientations (e.g., cognitive-behavioral, dynamic- and experiential therapies), there appears to be no significant difference in terms of the overall quality of the therapeutic alliance, nor its ability to predict outcome, across treatment orientations (Marmar, Gaston, Gallagher & Thompson, 1989; Salvio, Beutler, Wood & Engle, 1992; Spinhoven, Gisen-Bloo, Dyck, Kooiman & Arntz, 2007).

Despite this consistency in research findings, considerable controversy has prevailed in terms of how to interpret the alliance-outcome correlation. The fundamental question has been to what extent the therapeutic alliance contributes to outcome over and above initial improvements, having a causal effect on outcome (Barber, Connolly, Crits-Christoph & Siqueland, 2000). The lack of a clear and concise answer to this stems mostly from the fact that only a handful of studies have attempted to control for early symptom reduction or treatment gains as a potential confound, which may lead to an overestimation of the alliance-outcome correlation. The cumulative empirical data in support of the therapeutic alliance as a causal agent is not particularly strong, and mostly in favour of treatment of patients with depression or depressive symptoms (Barber et al., 2000; Klein et al., 2003; Ryum & Stiles, 2005; Ryum, Stiles & Vogel, 2007; Ryum, Stiles & Vogel, 2009). However, this topic continues to be an area of debate, and the finding that early, rather than later, ratings of the

therapeutic alliance are the best predictor of outcome, indirectly supports the therapeutic alliance as a curative factor.

Several patient- and therapist characteristics may theoretically influence the quality of the therapeutic alliance, as well as outcome (Ryum, Vogel, Hagen & Stiles, 2008). However, as recently demonstrated by Baldwin, Wampold and Imel (2007), the quality of the therapeutic alliance may actually be more closely related to therapist characteristics and interventions than patient qualities. They point out the importance of identifying techniques that influence and possibly interact with the therapeutic alliance, which coincides with the common clinical wisdom that therapist interventions, and the therapeutic bond, are interdependent phenomena in psychotherapy (Goldfried & Davila, 2006; Orlinsky & Howard, 1987).

Group climate

Group therapy unavoidably involves a larger set of people, as well as different treatment structures, compared to individual therapy. Consequently, constructs such as *climate* (a sense of constructive interpersonal investigation), *cohesion* (a sense of belonging) and *empathy* (a sense of being understood) have all been suggested to tap into important relationship qualities such as the therapeutic bond in this treatment modality (Johnson, Burlingame, Olsen, Davies & Gleave, 2005). The construct of the alliance has also been adapted to be used in group treatment settings. Theoretically, all constructs have been suggested to be important indicators of the quality of the relationships between group members, to be a “substrate” for work in the group and to foster the development of other positive therapeutic processes (MacKenzie, 2000; Tschuschke & Dies, 1994). For example, a high sense of cohesion or engagement may

represent patients' greater involvement in work-related tasks, thus increasing benefits from the group (Ogrodniczuk & Piper, 2003). Others (e.g., Yalom & Leszcz, 2005) have suggested that the therapeutic relationships and interpersonal exchanges between group members functions as the curative ingredients in effective group therapy, causing a positive outcome.

As in individual therapy, the therapeutic bond or climate in group therapy can thus be conceptualized as necessary prerequisites for method-specific therapeutic techniques or tasks to be implemented (that is, not curative in and of itself), or as having a direct causal effect upon outcome (curative in and of itself). These two theoretical positions largely parallels the distinction between process-groups, usually placing a high value on the interpersonal and interactional climate of the group (the group processes being the vehicle of change), and more highly-structured approaches such as cognitive-behavioral group therapy. In the latter treatment model, more attention is usually given to pre-planned, highly structured in-session activities that focus on specific change strategies, for example cognitive restructuring. Relatively little attention is given to the unique properties of the group format or atmosphere, such as group climate, cohesion or engagement, as important vehicles for treatment process and outcome (Burlingame et al., 2004).

In contrast to the construct of the therapeutic alliance in individual therapy, no overall consensus has yet been reached as to the most appropriate definition of the helpful relationship qualities in group therapy (Johnson et al., 2005; Joyce, Piper & Ogrodniczuk, 2007). The use of divergent constructs (cohesion, climate, empathy, alliance) is one source of this conundrum. Varying definitions of the same construct have been given, and constructs have been used interchangeably (e.g. MacKenzie, 2000). The proliferation of different empirical instruments has also been a problem, with many of them used in only a few studies (Burlingame et al., 2004). Overall, the concept of cohesion seems to have been the most

preferred term, but reviewers (Bednar & Kaul, 1994; Dion, 2000) have been led to conclude that there is little cohesion in the cohesion literature. Some have suggested that the cohesion-construct is too vague and amorphous to be useful as a unitary construct (Hornsey, Dwyer & Oei, 2007), but others caution against the development of new instruments since this may not resolve the underlying difficulties (Johnson et al., 2005). Interestingly, a recent multilevel structural equation model analysis suggests that the constructs of group climate, cohesion, alliance and empathy may all reflect one or more higher order constructs, which may be more related than prior evidence or clinical theory suggests (Johnson et al., 2005).

Empirical research on the association between the therapeutic bond and outcome in group therapy has produced more mixed results compared to research on the association between the therapeutic alliance and outcome in individual therapy. The cumulative empirical evidence for a positive association between group climate or cohesion and treatment outcome is overall not particularly strong, which is puzzling in light of the widely held belief that group cohesion is the quintessential process variable in group therapy (Taft, Murphy, King, Musser & DeDeyn, 2003). This probably reflects some of the difficulties in reaching an overall agreement on a definition, the use of different instruments as well as differences in measurement approaches, which makes comparisons between studies difficult. Some studies on analytic- and dynamic treatment models have suggested a positive relationship between group cohesion and treatment outcome with varying groups and patient problems, such as anxiety and depression (Budman, Soldz, Demby, Feldstein, Springer & Davis, 1989), complicated grief (Joyce et al., 2007) and neurotic and personality disorders (e.g., Tschuschke & Dies, 1994; MacKenzie & Tschuschke, 1993). Other studies have reported negative findings (e.g., Gillapsy, Wright, Campbell, Stokes & Adinoff, 2002; Lorentzen, Sexton, & Høglend, 2004; Marziali, Munroe-Blum, & McCleary, 1997).

Cognitive-behavioral group therapy (CBGT) is often characterized as placing less emphasis on the therapeutic relationship and more focus on specific techniques and tasks as the central ingredients of effective therapy, compared to dynamic- or experientially oriented therapies. Interestingly though, studies on CBGT have also produced some positive results. For example, groups with higher levels of cohesion were found to have greater improvement up to 6 months after treatment for agoraphobia compared to groups with lower cohesion (Hand, Lamontagne & Marks, 1974). Moreover, higher levels of cohesion have been found to be predictive of lower physical and psychological abuse at follow-up in abusive men (Taft et al., 2003), to be related to decreased post-treatment systolic and diastolic blood pressure as well as improved quality of life in patients with cardiac disease (van AnDEL, Erdman, Karsdorp, Appels, & Trijsburg, 2003), and early group cohesion has been found to predict better outcome in binge eating disorder (Castonguay, Pincus, Agras & Hines, 1998). Increase in group cohesion has also been related to improvements in social anxiety in a naturalistic study (Taube-Schiff, Suvak, Antony, Bieling & McCabe, 2007), although another study failed to report any effect with a similar diagnostic sample (Woody & Adessky, 2002). Also, a transdiagnostic CBT-treatment model recently reported increase in group cohesion to be related to a better treatment outcome (Norton, Hayes & Springer, 2008).

Taken together, the empirical evidence mostly indicates a positive association between relationship qualities such as group climate or cohesion and outcome in CBT-based group treatments, which highlights the importance of the therapeutic bond even in highly structured treatment approaches. This parallels findings from comparative trials in individual psychotherapy, where the quality of the therapeutic alliance has been found to be both equally strong in CBT-oriented therapies, and to predict treatment outcome equally well, compared to dynamic- and experiential therapies (Marmar et al., 1989; Salvio et al., 1992; Spinhoven et al.

2007). These findings indicate that an emphasis on pre-planned, highly structured in-session activities, and a directive therapist stance, does not necessarily undermine the importance of relationship factors in therapy. On the contrary, studies even suggest that more structure, especially in the early phase of group treatment, may improve cohesion (Stockton, Rhode, & Haughey, 1992).

One way to solve some of the problems related to research on the association between the helpful relationship qualities (therapeutic bond) and outcome in group therapy, would be to use a generic, trans-theoretical measure that is applicable to most treatment conditions. This would obviously facilitate comparisons between studies, opening up for broader generalizations in this field of research (Burlingame et al., 2004). The Group Climate Questionnaire-Short Form (GCQ-S; Mackenzie, 1983) is one such instrument, which in addition to a measure of cohesion or (a) *engagement* includes two other subscales labeled (b) *avoidance* (to what extent group members avoid responsibility for the change process in the group) and (c) *conflict* (taps into a sense of tension and conflict in the group). Higher ratings of engagement and lower ratings of both avoidance and conflict is usually thought to be associated with a positive treatment outcome.

Although extensively used across a variety of treatment settings and patient populations, the instrument has only been used in one randomized and controlled trial previously (Ogrodnizcuk & Piper, 2003). One of the main findings from this study was that higher ratings of engagement after session four, and averaged over the course of therapy, were directly associated with in-treatment improvement in two forms of short-term dynamic psychotherapy with complicated grief patients. Increase in engagement throughout treatment did not predict outcome. Generalizations from this one study to other treatment modalities as well as patient populations are somewhat limited, and it is also of interest to examine to what

extent dimensions of the group climate predict long-term follow-up outcome when controlling for prior in-treatment gains or symptom reduction.

1.4 Therapist interventions

According to the Generic Model of Psychotherapy (Orlinsky & Howard, 1987), another important aspect of the psychotherapy process is related to the therapeutic operations performed by patients and therapists. This category encompasses several technical aspects, including therapists' use of specific interventions or techniques aimed at resolving patients' personal difficulties (based on the therapist's expert understanding of the patient's presentation and the recommendations of the treatment they follow). Interventions can be viewed more generally as therapeutic change strategies (i.e., goals and steps taken to achieve them), or more specifically in terms of distinct types of therapeutic tactics (i.e., moves made to implement strategic steps) (Orlinsky et al., 2004). Compared to the therapeutic bond (therapeutic alliance; group climate), which usually is considered a common factor in psychotherapy, therapist interventions are typically theoretically derived and viewed as specific to one (or more) treatment model (s).

Different therapeutic approaches typically emphasize different techniques or therapist interventions as important for positive treatment outcomes. For example, the use of homework assignments and exposure to feared situations is emphasized in cognitive-behavioural therapies, which is based on an understanding of avoidance as a common but maladaptive coping strategy that needs to be challenged. Psychodynamically oriented treatments, on the other hand, usually highlights transference work as essential, which is based on the assumption that symptoms originates from maladaptive ways of relating to self and others, that needs to be interpreted and worked through in the therapist-patient

relationship. Comparative trials between STDP and CT have usually reported these treatments to be clearly differentiated from each other in terms of interventions applied (Goldfried, Castonguay, Hayes, Drodz & Shapiro, 1997; Goldfried, Raue & Castonguay, 1998; Svartberg et al., 2004).

Although there is limited evidence demonstrating specific techniques to have *unique* effects for a particular problem or diagnosis, there is clear evidence that therapists' timely and skillful use of various specific techniques contribute to outcome across treatment orientations and patient populations (see Orlinsky et al., 2004 for a recent review). Clearly, what the therapist does make a difference, but it is an empirical question *if* and *how* the use of theoretically derived techniques contributes to outcome. Further systematic research is the only *via regia* through which increased knowledge can be achieved in this domain, which has a rich potential for improving existing treatments. Research can both validate the use of a particular technique (by demonstrating that is related to beneficial treatment outcomes), or reveal non-significant or even potentially harmful effects which may serve as an important corrective for existing clinical practice. The following discusses the use of two specific therapist interventions (with relevance to cluster C personality disorders); first the use of homework assignments in CT, and secondly the use of transference work, which is typically emphasized in STDP, but also applied in CT.

1.5 Therapist competence in assigning homework in cognitive therapy

The use of homework assignments has traditionally been seen as an essential trademark of cognitive and behavioral therapies, and comparative trials have usually reported this technique to differentiate cognitive therapy from more dynamically oriented treatment models (Goldfried et al., 1997; Goldfried et al., 1998; Svartberg et al., 2004). Relatively independent

of whether the work is with Axis-I disorders such as depression, or Axis-II disorders such as cluster C personality disorders, between-session activities are hypothesized to have a significant effect upon treatment outcome in cognitive therapy (Beck, Rush, Shaw & Emery, 1979; Beck & Freeman, 1990). Homework has traditionally received little attention in descriptions of psychodynamic psychotherapy (Blagys & Hilsenroth, 2002).

However, the use of homework in psychotherapy has received increased attention from diverse theoretical orientations in recent years, including psychodynamic psychotherapy (Stricker, 2006). Moreover, a recent survey reported the use of homework assignments to be highly common across different theoretical orientations in routine clinical work (Kazantzis et al., 2005). Some authors have therefore suggested that the use of homework may be considered a 'common factor' across treatment modalities (e.g., Garfield, 1997; Kazantzis & Ronan, 2006), although there is likely to be a considerable variability in the type and the manner in which homework is integrated into treatments. Clearly, more empirical research is needed in order to demonstrate that the use of homework is associated with outcome across treatment orientations (considered a 'common factor'), especially in light of the fact that all previous research has been on cognitive-behavioural treatment models.

Studies on Axis-I disorders have mostly found a positive relationship between homework assignments (experimental designs comparing treatments with and without homework), compliance with homework assignments (single-group correlational designs) and improved treatment outcomes in cognitive and behavioural therapy, as demonstrated in a recent meta-analysis (Kazantzis, Deane & Ronan, 2000). Shortcomings have been noted, though, including a lack of measures of therapist competence in homework administration (Kazantzis et al., 2000). According to cognitive therapy theory, therapist factors such as

competence in assigning homework is hypothesized as crucial for both patient compliance and treatment outcome (Beck et al., 1979; Beck & Freeman, 1990).

Essentially, competence is related to the skillfulness with which a therapist administers a treatment. Adherence, or the degree to which a particular treatment has been delivered, is a necessary condition for competence, but does not guarantee competence (Barber, Liese & Abrams, 2003). Competence may be conceptualized and measured both globally (e.g., ‘general therapist competence in cognitive therapy’) and more specific (e.g., ‘therapist competence in assigning homework’). Moreover, the skillfulness with conducting a specific treatment is usually conceptualized as distinct from other, more general and non-modality specific therapist behaviors (‘facilitative conditions’) such as supportive encouragement, involvement, warmth and rapport.

Only one previous study has examined the effect of therapist competence in assigning homework on treatment outcome in cognitive-behavioral therapy. The results indicated that higher therapist competence was related to improved outcome in the treatment of depression (Shaw et al., 1999). Moreover, related research from cognitive-behavioral therapy has found therapist competence in reviewing homework to be linked with homework compliance (Bryant, Simons & Thase, 1999), and better treatment outcomes have been associated with specific therapist behaviors such as discussing barriers to completing homework for less involved clients and setting concrete goals (Detweiler-Bedell & Whisman, 2005). Thus, there is emerging evidence to suggest that therapist competence in assigning homework is related to both compliance and outcome in cognitive therapy. However, no studies have reported examining the effect of therapist competence in assigning homework on outcome with cluster C personality disorders in cognitive therapy.

1.6 Transference work in short-term dynamic psychotherapy and cognitive therapy

Transference work in general, and the use of transference interpretations in particular, have traditionally been seen as core active ingredients in psychodynamic psychotherapy (e.g. Malan, 1976; Sifneos, 1987; Gabbard & Westen, 2003). Since transference interpretations are considered to be anxiety-provoking, especially in brief therapy and/ or early in treatment, it is assumed that patients must fulfil criteria of suitability in terms of greater psychological resources and more mature relationships to benefit from this technique (Gabbard, 2006). Even so, according to a recent review of the empirical literature (see Høglend & Gabbard, *in press*), only one of 10 previous studies has reported a positive correlation between frequency of transference interpretations and outcome. The remaining studies have mostly reported negative or non-significant correlations between frequency of transference interpretations and a variety of outcome measures (e.g., depressive symptoms, general symptoms, dynamic scales).

This has led researchers to study therapist and patient factors that may affect the relationship between the frequency of transference interpretations and outcome, such as (a) the patient's pre-treatment level of interpersonal functioning (e.g., Connolly, Crits-Christoph, Shappell, Barber, Luborsky & Shaffer, 1999; Høglend, 1993; Høglend et al., 2006, 2008; Ogrodniczuk, Piper, Joyce & McCallum, 1999), (b) the "accuracy" or quality of the therapist's interpretations (e.g., Crits-Christoph, Cooper & Luborsky, 1988) and (c) the patient's immediate response to interpretations (e.g., Luborsky, Bachrach, Graff, Pulver & Christoph, 1979; McCullough et al., 1991). In general, the results suggest that transference interpretations only produce positive change for certain patients and under certain optimal conditions. This point is well illustrated by Schut et al. (2005) who found lower concentrations of transference interpretations in the context of mutually affiliative therapist-

patient interactions to be associated with positive change in psychodynamic psychotherapy with avoidant personality disorder.

Patients with severe interpersonal problems, as found in the cluster C personality disorders, may be especially prone to perceive transference work as anxiety-provoking or critical, particularly in the early phases of treatment, as they are prone to drop-out and have poor treatment outcomes (Leichensring & Leibling, 2003). An interpretative focus on the relationship may give rise to further dismissive and avoidant patient behaviors, leading ultimately to a poor treatment response. However, the impact of transference work may be enhanced or moderated by other factors, such as the quality of the therapeutic alliance. As recently pointed out by Gabbard (2006), transference interpretations may be seen as a “high risk – high gain” scenario, where a good therapeutic alliance may be a necessary prerequisite for a positive outcome with this technique.

While there is ample evidence demonstrating the therapeutic alliance as an important common factor (Horvath & Symonds, 1991; Martin et al., 2000), there is more limited research that has examined techniques that influence and possibly interact with the therapeutic alliance (Baldwin et al., 2007). Empirically demonstrating an interaction-effect between the therapeutic alliance and transference work would be an important contribution to the research literature. Moreover, although transference work may play a more prominent role in psychodynamic therapies than in other treatment modalities, studies have shown that it is a relevant concept to examine also in cognitive therapy (e.g., Gibbons et al., 2002).

2.0 Aims

The main aim of this thesis is to empirically examine the influence of two essential aspects of the Generic Model of Psychotherapy (Orlinsky & Howard, 1987) on outcome in psychotherapy, namely the therapeutic bond (therapeutic alliance; group climate) and therapist interventions (homework assignments; transference work). An additional aim is to examine how they may interact with each other and contribute to outcome. More specifically, the aims for each paper were as follows:

Paper I. Perceived group climate as a predictor of long-term outcome in a randomized controlled trial of cognitive-behavioral group therapy for patients with comorbid psychiatric disorders.

Research on group therapy indicates that various dimensions of the therapeutic bond or helpful relationship qualities (cohesion, climate, empathy, alliance) are associated with outcome. However, the use of a wide variety of empirical scales makes comparisons between studies as well as generalizations difficult. A trans-theoretical measure, the GCQ-S is available, but has never been tested with cognitive-behavioural group therapy. Validating the usefulness of the GCQ-S in this treatment is important, not the least since cognitive-behavioral therapy often is characterized as emphasizing pre-planned, highly structured in-session tasks, and downplaying the role of relationship qualities which are not hypothesized to be essential for treatment outcome. The aim of this study was thus to examine whether perceived dimensions of the therapeutic bond as measured with the GCQ-S (engagement, avoidance, conflict) predicted long-term (1 year) outcome in cognitive-behavioral group therapy for patients with comorbid psychiatric disorders when controlling for in-treatment improvements.

Paper II. The effects of therapist competence in assigning homework in cognitive therapy with cluster C personality disorders: Results from a randomized controlled trial.

Empirical research on Axis-I disorders has documented a positive relationship between homework assignments and improved outcomes in cognitive and behavioural therapy, but the lack of measures of therapist competence in homework administration has been noted as a major shortcoming. Moreover, no studies have examined the effect of homework assignments on outcome with patients with cluster C personality disorders in cognitive therapy. The aim of this study was therefore to examine to what extent early ratings of therapist competence in assigning homework (observer rated) predicted mid- and post treatment outcome (symptoms, interpersonal problems and personality pathology) in cognitive therapy for patients with cluster C personality disorders.

Paper III. The role of transference work, the therapeutic alliance and their interaction in reducing interpersonal problems among psychotherapy patients with cluster C personality disorder.

Research on psychodynamically oriented therapies indicates that the use of transference work in general, and transference interpretations in particular, is not as strongly associated with beneficial treatment outcomes as previously believed. Some research even indicates an inverse relationship between the frequency of transference interpretations and successful treatment outcomes. However, to what extent the use of transference work is beneficial or not may be moderated by other relationship qualities such as the therapeutic alliance, but this has never been examined in previous research. The aim of this study was therefore to examine whether early ratings of transference work, the therapeutic alliance and their interaction

predicted a reduction in interpersonal problems in short-term dynamic psychotherapy and cognitive therapy with cluster C personality disorders.

3.0 Method

3.1 The samples

The papers in this thesis are based on two patient samples, as described below in closer detail.

3.11 Sample 1

Patients were taken from a previously published randomized controlled trial comparing the effectiveness of cognitive-behavioral group therapy (CBGT) to wait-list controls for patients with comorbid psychiatric disorders (Hagen, Nordahl, Kristiansen & Morken, 2005). 49 patients were referred for inclusion from psychologists and psychiatrists working in the psychiatric in- and outpatient clinics at the St. Olavs Hospital HF, but three patients were excluded as they met the exclusion criteria (psychosis, substance abuse, suicidal behavior and cluster A or B personality disorders). All patients were assessed with the Structured Clinical Interview for the DSM-IV, Axis-I (First, Spitzer, Gibbon & Williams, 1995a) and II (First, Spitzer, Gibbon, Williams & Benjamin, 1995b), and randomly assigned to either a CBGT program or a waiting list.

Thirty-two patients completed 8 weeks of therapy in the original study, and patients from both treatment arms were combined in the present study. Two patients were excluded due to missing group climate data, and three more patients were excluded due to missing

outcome data leaving a sample of $N = 27$ for further analysis. One patient did not complete the conflict scale on the group climate questionnaire and was excluded from some of the analyses. The patient sample consisted of 22 females and 5 males, with a mean age of 37.2 ($SD = 10.2$). Main diagnoses (n) were anxiety disorders (40), depressive disorders (13) and cluster C personality disorders (7). Each patient could receive more than one diagnosis.

3.12 Sample 2

Patients were taken from a previously published randomized controlled trial comparing the effectiveness of short-term dynamic psychotherapy and cognitive therapy for patients with cluster C personality disorders (Svartberg et al., 2004). A total of 127 patients were referred from two large psychiatric outpatient clinics, family doctors and psychiatrists and psychologists in private practice during a 5-year period. Patients were included if they were between ages 18-65 years and met the criteria for at least one DSM-III-R cluster C personality disorders or self-defeating personality disorder. All patients were assessed with the Structured Clinical Interview for DSM-III-R Axis I (Spitzer, Williams, Gibbon & First, 1990a) and II (Spitzer, Williams, Gibbon & First, 1990b) by an intake evaluator. Patients who met the criteria for any cluster A or cluster B personality disorder, current or past comorbid psychotic disorder, current substance dependence or abuse, current eating disorder, organic brain disorder and other serious physical illness, active suicidal behavior, refusal to have the therapy sessions videotaped, and refusal to discontinue other active treatment were excluded. 51 patients were randomized to either 40 session of short-term dynamic psychotherapy (STDP) or cognitive therapy (CT) but one patient discontinued midtherapy after childbirth in agreement with the therapist, leaving a sample of $n = 50$. One patient was excluded in paper III due to a lack of alliance-data, and paper II included only patients from the CT condition.

The total patient sample ($n = 50$) consisted of 25 females and 25 males, with a mean age of 34 ($SD = 8.8$). Main diagnoses (n) were cluster C personality disorders (75), anxiety disorders (68) and depressive disorders (49). Each patient could receive more than one diagnosis. Treatment groups (STDP vs CT) did not differ significantly on any demographic or diagnostic characteristic.

3.2 Assessment instruments

Several instruments were employed in the studies comprising this thesis, including self-reports, semi-structured clinical interviews and observer rated scales. These were as follows:

3.2.1 Self-reports: Symptoms

The Symptom Checklist 90-Revised (SCL-90-R) [study 1, 2]

The SCL-90-R (Derogatis, 1983) is a 90-item self-report instrument, where patients are asked to rate a broad range of symptoms on a 5-point Likert scale ranging from 0 = *none* to 4 = *extreme* during a one-week period prior to administration. A general symptom score (GSI) as well as scores for nine subscales may be calculated. The SCL-90-R has been shown to have good psychometric properties (Bech, Allerup, Maier, Albus, Lavori & Ayuso, 1992; Derogatis & Cleary, 1977; Lipman, Covi & Shapiro, 1979).

The Beck Depression Inventory (BDI) [study 1]

The BDI (Beck, Rush, Shaw & Emery, 1979) is a 21-item self-report instrument that measures depression severity during the last week. Items are answered on a 4-point Likert scale ranging from 0 = *not at all* to 3 = *very much*. The BDI has been shown to be both a reliable and valid measure of depression severity in both clinical and non-clinical populations (Beck, Steer & Garbin, 1988).

The Beck Anxiety Inventory (BAI) [study 1]

The BAI (Beck, Epstein, Brown & Steer, 1988) is a 21-item self-report instrument that measures anxiety severity for the past week. Items are rated on a 4-point Likert scale ranging from 0 = *not at all* to 3 = *very much*. The BAI is established as a reliable and valid measure of anxiety severity, and is often recommended as a companion instrument to the BDI (Beck & Steer, 1993).

3.22 Self-reports: Interpersonal problems, maladaptive schemas and personality pathology

The Inventory of Interpersonal Problems (IIP/ IIP-64) [study 1, 2, 3]

The IIP (Horowitz, Rosenberg, Baer, Barbara, Ureño & Villaseñor, 1988) is a 127-item self-report instrument that measures problems related to interpersonal functioning. Patients are asked to rate interpersonal behavior that is “hard for you to do” or “you do too much” on a 5-point Likert scale ranging from 0 = *Not at all* to 4 = *Extremely*. Reliability and validity of the instrument is reported as acceptable (Horowitz et al., 1988). A shortened version (IIP-64),

based upon the work of Alden, Wiggins and Pincus (1990), is also available. This version is abbreviated to 64 items, in which 8 subscales are conceptually organized in a circumplex manner along two, main dimensions (dominance; love).

The Young Schema Questionnaire (YSQ) [study 1]

The YSQ (Young, 1994) is a 205-item self-report questionnaire that measures 16 early maladaptive schemas. Items are rated on a 6-point Likert scale ranging from 0 = *almost never true on me* to 5 = *almost always true on me*. Scores for each of the 16 schemas as well as a total score may be calculated. The YSQ has been shown to have good psychometric properties and clinical utility (Schmidt, Joiner, Young & Telch, 1995; Lee, Taylor & Dunn, 1999; Hoffart et al., 2005).

The Millon Clinical Multiaxial Inventory (MCMI) [study 2]

The MCMI (Millon, 1984) is a 175-item true-false questionnaire that assess psychopathology according to the taxonomy proposed by Millon. The instrument includes an assessment of common disorders as outlined in the DSM-III-R, including personality disorders. The MCMI has been found to have acceptable reliability and validity, although subsequent revisions of the inventory have been undertaken.

3.23 Self-reports: Therapeutic alliance and group climate

The Helping Alliance Questionnaire (HAQ) [study 2, 3]

The HAQ (Luborsky, Crits-Christoph, Alexander, Margolis & Cohen, 1983) is a self-report instrument that assesses the quality of the therapeutic alliance. Patients are asked to evaluate 11 statements using a scale from +3 (absolutely true) to -3 (absolutely wrong), with a higher score indicating a stronger therapeutic alliance. However, the HAQ has been found to comprise items that reflect early symptomatic improvement, and has later been revised (Luborsky, Barber, Siqueland, Johnson, Najavits, Frank & Daley, 1996). There is general agreement that a defining feature of the therapeutic alliance is that it taps into the quality of the bond between a therapist and a patient, not to be confounded with prior symptom reduction or other treatment benefits. The HAQ has been shown to be reliable and moderately related to outcome (Horvath & Symonds, 1991; Martin et al., 2000).

The Group Climate Questionnaire – Short Form (GCQ-S) [study 1]

The GCQ-S (MacKenzie, 1983) is a 12-item, trans-theoretical self-report measure that assesses individual group members' perceptions of the group's therapeutic environment. Each item is rated on a 7-point Likert scale, ranging from 0 = *not at all* to 6 = *extremely*. The GCQ-S consists of three factor-analytically derived subscales: (a) *Engagement* (5 items that call for ratings on self-disclosure, cognitive understanding and confrontation); (b) *Avoidance* (3 items - to what extent the group member avoids responsibility for their change processes); and (c) *Conflict* (4 items - measures interpersonal conflict and distrust between group members as well as withdrawal). Construct validity of the GCQ-S has been tested extensively (Kivlighan

& Goldfine, 1991; Tschuschke & Greene, 2002), with high internal consistency on the subscales (alpha coefficients ranging from .88 to .94).

3.24 Clinical interviews

The Structured Clinical Interview for the DSM-III-R/ DSM-IV Axis-I (SCID-I) [study 1, 2, 3]

The SCID-I (Spitzer et al., 1990a; First et al., 1995a) is a semi-structured interview developed to assess DSM-III-R/ DSM-IV diagnoses. It includes the diagnostic criteria for the most common disorders, with corresponding interview questions, as follows: Mood episodes; psychotic symptoms; psychotic disorders; mood disorders; substance abuse disorders; and anxiety, adjustment, and other disorders.

The Structured Clinical Interview for DSM-III-R/ DSM-IV Axis II Personality Disorders (SCID-II) [study 1, 2, 3]

The SCID-II (Spitzer et al., 1990b; First et al., 1995b) is a semi-structured interview developed to assess DSM-III-R/ DSM-IV Axis II personality disorders. Non-official disorders such as depressive personality disorder, passive-aggressive personality disorder and personality disorder not otherwise specified, are also included.

3.25 Observer rated instruments

The Cognitive Therapy Scale (CTS) [study 2]

The CTS (Young and Beck, 1980) is a 11-item, observer rated instrument which classifies therapist competence in cognitive therapy on a 7-point Likert scale, ranging from 0 = *low competence* to 6 = *high competence*. The CTS has been found to consist of two factors (skill and structure), and to have good psychometric properties (Vallis, Shaw, & Dobson, 1986). However, problems with poor interrater reliability and concerns about the validity of the scale have also been reported (see Kazantzis, 2003 for a review). Specifically, adherence and competence appear to be confounded on the scale. Revisions have been undertaken, such as the Cognitive Therapy Adherence and Competence Scale (Liese, Barber & Beck, 1995), demonstrating acceptable psychometric properties (Barber et al., 2003). However, the high correlation between adherence and competence ($r = .96$) demonstrates continuing difficulties in separating these constructs successfully. Therapist competence in assigning homework was reliably rated in the Svartberg et al. (2004) study (Pearson correlation of $r = .74$).

The Inventory of Therapeutic Strategies (ITS) [study 3]

The ITS (Gaston & Ring, 1992) is a 13-item, observer-based instrument classifying therapists' interventions in terms of categories of intention (exploratory, supportive or work enhancing), content, and object focus (e.g., therapist, others, self). Scoring is based on a Likert-scale ranging from 0 = *not addressed* to 7 = *major emphasis*. Reliability and validity of the instrument has been reported as adequate (Gaston & Ring, 1992; Gaston, Thompson, Gallagher, Cournoyer & Gagnon, 1998). Interrater reliability of the transference work

category was found to be acceptable in the Svartberg et al. (2004) study (Pearson correlation of $r = .68$).

3.3 Treatments

A total of three different psychological treatments were given to patients included in this thesis, as described below.

3.3.1 Cognitive-behavioral group therapy [study 1]

The treatment manual (Cognitive-Behavioral Group Therapy for comorbid psychiatric disorders) was based on a modified version of the manual developed by Free (1999). Work with the ABC-model, role-play, *in vivo* exposure and developing coping strategies to prevent relapse were central ingredients. The program provided a mix consisting of psycho-education related to depression and anxiety, group exercises and homework tasks. Overall, the treatment manual highlights the importance of structured therapeutic tasks as the central curative components of treatment. Qualities related to the therapeutic relationships are seen as important, but not hypothesized as a central curative pathway.

Therapists were two experienced female cognitive therapists, who had weekly supervision with one of the main authors (HMN). The competence of the therapists was evaluated according to the Cognitive Therapy Scale (Young & Beck, 1980), using video-recordings of the third and tenth treatment session. Competence is rated on a 7-point Likert scale, ranging from zero (low competence) to six (high competence). The two therapists in the original study received an overall mean score of 4.18 ($SD = .32$) and 4.05 ($SD = .29$),

respectively, which is considered acceptable levels of therapist competence in cognitive therapy (Vallis et al., 1986).

3.3.2 Cognitive therapy [study 2, 3]

The cognitive therapy treatments followed Beck and Freeman's treatment manual for personality disorders (1990), which conceptualizes these disorders as originating in pathological core beliefs. The therapist initially focuses on the treatment of any existing Axis-I pathology, and then on recognizing, understanding, and evaluating core beliefs with the objective of shifting those belief structures to more adaptive forms. Therapists employed three main techniques: 1) guided imagery to help the patient understand how past and new experiences shape and maintain current beliefs; 2) homework assignments with a focus on trying out new adaptive responses, and 3) cognitive, behavioral, and emotion-focused techniques to dispute pathological core beliefs and to develop new and more adaptive beliefs.

Therapists consisted of six clinical psychologists, all specialists in clinical psychology as approved by the Norwegian Psychological Association. All therapists were male and in full-time clinical practice, except for one, and their age ranged from 37 to 47 years (mean = 42.3, *SD* = 2.5). Their general clinical experience ranged in length from 6 to 21 years (mean = 11.2, *SD* = 4.3), their experience with CT in general ranged from 1.2 to 9.8 years (mean = 5.9, *SD* = 2.4) and their experience with CT for personality disorders ranged from 1.2 to 7.5 years (mean = 4.1, *SD* = 1.8). Training specifically related to the study consisted of weekly peer-based supervision meetings, as well as annually supervision seminars with visiting cognitive therapy experts (A. Freeman, J. Young, J. Beck).

3.3.3 Short-term dynamic psychotherapy [study 3]

McCullough Vaillant's short-term dynamic psychotherapy model (McCullough-Vaillant, 1997) follows the fundamental structure of psychodynamic psychotherapy as outlined by Malan's (1979) triangle of conflict; i.e., defenses and anxieties block the expression of true feeling. It is hypothesized that psychopathology is alleviated through desensitization or habituation of inhibitory feelings (anxiety, shame, guilt, and pain), that activate defenses and rigidly block the expression of adaptive affect. In terms of therapeutic strategies, the therapists' (1) clarifies rather than confronts defenses, (2) empathizes with and exposes the underlying conflicted affect, and (3) aids at regulating rather than provoking anxiety. The treatment model has also been conceptualized in learning theory terms as the desensitization of 'Affect Phobias', or "fears of feeling" (McCullough, Larsen, Schanche, Andrews, Kuhn et al., 2003).

Therapists consisted of three psychiatrists, as approved by the Norwegian Medical Association, and five specialists in clinical psychology as approved by the Norwegian Psychological Association. Five were male and three were female, with an age-span ranging from 34 to 49 years (mean = 41.4, SD = 4.7). All but one were in full-time clinical practice. Their general clinical experience ranged in length from 2 to 14.5 years (mean = 9.2, SD = 3.6), their experience with short-term dynamic psychotherapy in general ranged from 1.2 to 10.5 years (mean = 6.0, SD = 2.8), and their experience with this model of short-term dynamic psychotherapy for personality disorders ranged from 1.2 to 7.2 years (mean = 4.7, SD = 1.9). Study-specific training consisted of weekly peer-based supervision meetings, as well as supervision seminars with Dr. L. McCullough twice annually.

3.4 Ethical considerations

All patients in the three trials mentioned gave their informed consent to participate in the trials.

4.0 Overview of the studies and the main results

4.1 Study I. Perceived group climate as a predictor of long-term outcome in a randomized controlled trial of cognitive-behavioural group therapy for patients with comorbid psychiatric disorders

In paper I, the aim was to examine the therapeutic bond as measured by perceived dimensions of the group climate (engagement, avoidance and conflict) as predictors of long-term (1 year) follow-up in a manualized, structured time-limited cognitive-behavioral group therapy (CBGT) for patients with comorbid psychiatric disorders. Controlling for prior in-treatment change (pre- and post scores), the results indicated that higher ratings of the therapeutic bond as measured by perceived engagement were strongly related to all outcome measures at follow-up, except for anxiety symptoms (BAI). Higher ratings of avoidance were associated with lower anxiety symptoms at follow-up, whereas ratings of conflict were unrelated to all follow-up scores. The results provide partial support for the use of the GCQ-S as a predictor of long-term follow-up outcome in CBGT, and highlight perceived engagement (or cohesion) as the most important dimension in an otherwise highly structured treatment approach.

4.2 Study II. The effects of therapist competence in assigning homework in cognitive therapy with cluster C personality disorders: Results from a randomized controlled trial

In paper II, the main aim was to examine early ratings of therapist competence in assigning homework as a predictor of mid- and post treatment outcome for patients with cluster C personality disorders in cognitive therapy. Twenty-five patients that underwent 40 sessions of cognitive therapy were taken from a randomized controlled trial (Svartberg et al., 2004). Therapist competence in assigning homework was rated by two independent raters assessing a session early in treatment (mostly session six) using the Cognitive Therapy Scale (CTS; Young & Beck, 1980).

The results demonstrated that higher ratings of therapist competence in assigning homework predicted a positive outcome at both mid- and post treatment, even when controlling for early change. Not only was therapist competence in assigning homework predictive of reduced symptoms, but also of reduced interpersonal problems as well as cluster C personality pathology. Post-hoc analyses revealed that neither therapist competence in agenda setting nor the use of supportive nor work-enhancing interventions predicted outcome. The results indicate that therapist competence in assigning homework is important for both symptom reduction and personality change in CT in the treatment of patients with cluster C personality disorders, at least in the early treatment phase.

4.3 Study III. The role of transference work, the therapeutic alliance and their interaction in reducing interpersonal problems among psychotherapy patients with cluster C personality disorder

In paper III, the main aim was to examine whether transference work, the therapeutic alliance and their interaction predicted a reduction in interpersonal problems at treatment termination in patients with cluster C personality disorders. Forty-nine patients from a randomized controlled trial investigating the effectiveness of short-term dynamic psychotherapy and

cognitive therapy were included (Svartberg et al., 2004). Transference work was measured mostly in session six using the Inventory of Therapeutic Strategies (ITS; Gaston & Ring, 1992), while the therapeutic alliance was measured with the Helping Alliance Questionnaire (HAQ; Luborsky et al., 1983) after session four.

Controlling for treatment condition, the results indicated that less emphasis on transference work significantly predicted overall reduced interpersonal problems at treatment termination, whereas the effects of the therapeutic alliance did not reach statistical significance. An interaction effect was also demonstrated, indicating that a stronger emphasis on transference work performed on patients with lower therapeutic alliance ratings, was associated with a smaller reduction in interpersonal problems at termination. A similar pattern was observed when different types of interpersonal problems were examined according to the four main quadrants of the inventory of interpersonal problems circumplex model. Post-hoc analyses did not find evidence of any three-way interaction effects (transference work * therapeutic alliance * treatment condition).

5.0 Discussion

5.1 Main results from the studies

Study 1

Paper I demonstrated that the therapeutic bond as measured by perceived dimensions of the group climate (engagement) is strongly predictive of long-term outcome in CBGT. This underlines the importance of relationship factors in an otherwise highly structured treatment

approach, and parallels findings from the study by Ogrodniczuk & Piper (2003). Engagement captures many of the essential elements of cohesion, and may be described as an indicator of the positive therapeutic bond that is usually assumed to be necessary in any effective therapy (Orlinsky et al., 2004). Engagement probably also reflects work and self-disclosure among group members, which is likely to be associated with positive change, and the limited time available in short-term group treatment may function as a positive catalyst for the development of engagement. However, engagement is a way of characterizing activity, and not an activity in and of itself (Hatcher & Barends, 2006), so the results should not be interpreted as implying that the use of technique is unimportant. The attempt to control for prior, in-treatment symptom reduction adds to the role of the group climate as a vehicle of change (“causal agent”) in group therapy, and especially the dimension of engagement or cohesion.

The lack of support for engagement as a predictor of anxiety symptoms is noteworthy, and may point to a possible limit for the effect of relationship variables in therapy. This finding could be interpreted as supporting the notion that a positive therapeutic bond is not sufficient for dealing effectively therapeutically with anxiety symptoms/ disorders, which is in accordance with research documenting the use of exposure-oriented treatments as the ‘treatment of choice’ for several anxiety disorders (Lambert & Ogles, 2004).

Study 2

Paper II reported therapists’ competence in assigning homework to be an important predictor of both mid- and post treatment outcome in CT for patients with cluster C personality disorders, even when controlling for initial symptom improvement. The positive effects noted

at mid-treatment reflects the rapid benefits of assigning homework in a competent manner in CT, in line with previous research showing both therapist competence in assigning homework (Shaw et al., 1999), as well as discussing barriers to completing homework for less involved patients and setting concrete goals (Detweiler-Bedell & Wishman, 2005) to be associated with improved outcomes in CT for depression. The finding that neither therapist competence in agenda setting nor the use of supportive or work-enhancing interventions predicted outcome, indicates that therapist competence in assigning homework is an important and specific skill in CT.

The results thus emphasises the quality in assigning, monitoring, and reviewing homework, and not its quantity, as crucial for treatment outcome. Consequently, it appears that it is important for therapists to devote sufficient time to homework assignments in the early phases of treatment in CT for cluster C personality disorders. Successfully achieving previous homework assignments, as well as receiving encouragement and feedback from the therapist, may enhance self-efficacy beliefs as well as strengthen adaptive, health-related behaviours (Kazantzis & L'Abate, 2005).

Study 3

Paper III demonstrated a negative main-effect of transference work, as well as a 'negative' interaction-effect between transference work and the therapeutic alliance, on interpersonal problems at treatment termination with patients with cluster C personality disorders. Our main interpretation of the negative interaction-effect is that therapists who were aware of a relatively poor therapeutic alliance with their patients, may have reacted to this with a stronger emphasis on transference work in order to reengage the patient or strengthen the

therapeutic alliance. This may have engendered increased anxiety in these patients, perhaps accompanied by negative interpersonal exchanges, resulting in less therapeutic progress. No three-way interaction effects (transference work * therapeutic alliance * treatment condition) were observed when this was examined in post-hoc analyses. This indicates that it is not the treatment type in general that affects a reduction in interpersonal problems, but rather to what extent the therapist succeeds in developing a good therapeutic alliance with the patient and is judicious in the use of transference work, especially in the context of a poor therapeutic alliance early in treatment.

Further post-hoc analyses examining the interaction between transference work and the therapeutic alliance in the four IIP-C quadrants mostly replicated the main results. This indicates that although patients with cluster C personality disorders may present with various types of interpersonal problems, the negative interaction between transference work and the therapeutic alliance is best explained as a general effect.

General discussion

Both study II and III found evidence for the use of two therapist interventions as having a significant impact on treatment outcome in CT (study II) and CT and STDP (study III), which adds to the importance of examining the effects of specific therapist behaviours in psychotherapy. While transference work was examined in both STDP and CT, therapist competence in assigning homework was observed and assessed only in CT. The results from study II indicates that therapist competence in assigning homework may be an important and specific therapist skill in CT, but the lack of any difference in terms of outcome between STDP and CT in the original trial (Svartberg et al., 2004) demonstrates that the intervention

did not produce *unique* effects. STDP and CT may achieve a similar outcome due to a similarity in process (e.g., in-session impact, according to the Generic Model of Psychotherapy), but these changes may again be elicited by the competent and skillful use of specific and possibly quite different techniques in the respective treatment approaches.

Study III found evidence of a ‘negative’ interaction-effect between the use of transference work (therapist intervention) and the therapeutic alliance (therapeutic bond) on outcome in STDP and CT with cluster C personality disorders. This clearly demonstrates the usefulness of examining various components of the Generic Model of Psychotherapy (Orlinsky & Howard, 1987) concurrently, since they may interact and be catalytic to each other. Unfortunately, study II did not examine any potential interaction-effects between therapist competence in assigning homework and the therapeutic alliance on outcome in CT with cluster C personality disorders. However, this has been examined ad-hoc utilizing a similar data-analytic strategy as undertaken in study III included in the present thesis. These results are briefly summarized as follows.

There was no evidence of an interaction-effect between therapist competence in assigning homework and the therapeutic alliance, and outcome. Moreover, the therapeutic alliance only significantly predicted IIP scores at mid-treatment, whereas therapist competence in assigning homework still predicted outcome on all measures (mid and post) when controlling for the therapeutic alliance. Co-linearity was not a concern, since the correlation between the therapeutic alliance and therapist competence in assigning homework was non-significant. Transference work addresses the patient’s thoughts, feelings and fantasies that transpire in relation to the therapist in the treatment session, whereas the focus in assigning homework usually is on the accomplishment of between-session tasks. Although there admittedly may be challenges associated with the latter, a likely explanation for the lack

of any interaction-effect is that assigning homework places less strain on the therapeutic bond, compared to the use of transference work. It is of course also important to note that competence in assigning homework was measured in terms of the *quality* of the intervention, whereas transference work was measured only by *quantity*.

The finding that the therapeutic bond as measured by the group climate dimension of engagement was associated with long-term outcome in CBGT in study I, is in accordance with previous research documenting the importance of the therapeutic bond in both group- and individual psychotherapy. Although this points to the importance of common factors in an otherwise highly structured treatment approach, it is again important to note that this does not imply that the use of technique lack significance. The therapeutic bond and therapist interventions represent two different perspectives on process in psychotherapy, where the former addresses the patient's experience and the latter the therapist's behaviours. Technique is an activity, whereas the therapeutic alliance is a way to characterize activity and addresses the patients experience (Hatcher & Barends, 2006). Both are seen as contributing to outcome according to the Generic Model of Psychotherapy (Orlinsky & Howard, 1987), and as demonstrated in this thesis.

5.2 Limitations of the studies

There are some general limitations with the three studies included in the present thesis, which are worth noting. First, all papers employed a single-time measure approach, with group climate (study I), therapist competence in assigning homework (study II) and transference work (study III) rated only once during each treatment. It is important to note that these ratings may not be representative of the treatments as a whole. Secondly, all studies were explorative and correlational, which prohibits any definitive conclusions regarding causality.

Third, the results may not generalize to other treatments or patient populations than those covered in the present thesis.

More specific limitations for each study also need to be addressed. In study I, patients rated both the predictor and outcome variables, which may increase the likelihood for a “halo” effect. Moreover, the study did not take into account drop-out rates, and limiting the analyses to the completers sample may have influenced the results. Although we did control for symptoms at both intake and treatment termination, it is not possible to rule out the possibility that ratings of the group climate may have been related to prior symptom reduction. There is also a risk that the results are somewhat overstated, due to the fact that the group climate variables were treated as independent data, ignoring the group level. Furthermore, although the patients did not receive any further formal therapy in the follow-up period, we do not know whether the patients had any informal contact with each other in that time period. Dimensions of the group climate may also wax and wane throughout treatment, and be related to both process and outcome in more non-linear ways than suggested in this study, as hypothesized by MacKenzie (1983). Lastly, patients’ ratings of the group climate may not necessarily reflect the “real” climate in the group, and it is important to note that the present study only examined patients’ perceptions of the group climate as predictors of long-term outcome.

Study II utilized a measure of therapist competence in assigning homework (CTS), which includes only one item. This may obviously obscure more fine-grained nuances related to the process of assigning, monitoring, and reviewing homework. Moreover, as the study did not include a measure of patient engagement in homework assignments, the effect of this on both therapist competence in assigning homework and outcome is unknown. It is also important to note that the specific items on the HAQ are not a well-tested measure of

symptom distress, so the efforts to control for initial symptom improvement should be interpreted with caution. Lastly, the study did not examine to what extent therapist competence in assigning homework later in treatment predicted a positive treatment outcome, and potential therapist effects (e.g., age, gender, experience) were not examined in detail in the study.

Study III did not evaluate the quality or appropriateness of therapists' transference work, nor the patients' immediate responsiveness to these interventions. Further, the study did not control for potential symptom reduction achieved before the therapeutic alliance was assessed, which leaves open the possibility that alliance ratings may have been influenced by prior symptom reduction to some extent. However, as pointed out by Baldwin et al. (2007), it is unlikely that early symptom reduction moderates the association between the therapeutic alliance and outcome, and rapid symptom reduction is not expected in the present sample consisting of patients with cluster C personality disorders. It is also important to bear in mind that only one outcome measure was selected for the present study, and we do not know to what extent the results generalize to other outcome measures. Potential therapist effects (e.g., age, gender, experience) were not examined in detail.

5.3 Conclusions and implications

The finding in study I that perceptions of the therapeutic bond, as measured by group climate (engagement), may be crucial for positive long-term follow-up outcome in cognitive behavioural group therapy for comorbid disorders has important clinical implications. First, developing a group climate where patients are active and engaged may be seen as perhaps a common therapeutic task in all group treatments, which do not necessarily conflict with the use of other modality-specific techniques or structured tasks. On the contrary, the heavy

emphasis on structure and pre-planned in-session activities in CBT-oriented group therapy may actually propel engagement. Providing a clear treatment rationale, setting an agenda and giving homework assignments are other examples of creating structure and engagement. Second, therapists should also try to identify patients that are relatively less engaged (by collecting group climate data throughout the treatment process), since they are at risk for a poorer long-term outcome.

The results from study II indicate that therapist competence in assigning homework may play a prominent role for both symptom reduction as well as improved interpersonal problems and reduced cluster C personality pathology in CT for patients with cluster C personality disorders. This highlights the importance of devoting sufficient time to homework assignments, at least in early phases of treatment, and to assure the quality of these interventions. Moreover, it is important to recognise that competence in homework assignments appears to be a *specific skill* in CT, not to be confounded with therapist competence in agenda setting or other, non-modality specific behaviours (supportive encouragement, involvement, warmth, rapport). Adequate training and skill-development for CT therapists in this domain thus appears to be important.

The findings from study III indicates that a low amount of transference work may be beneficial in reducing interpersonal problems for patients with cluster C personality disorders in both STDP and CT. However, the results also demonstrate “the risks” involved in having a stronger emphasis on transference work, especially in the context of a weak therapeutic alliance. The bottom line appears to be that increasing the emphasis on transference work has much potential for negative effects, and may contribute to making a difficult situation worse. To contribute to improvement, transference work may require a good therapeutic alliance as

well as the therapist's careful attention to patient affective versus defensive responses, as suggested by McCullough et al. (1991).

Taken together, the results add to the importance of examining the individual and combined contribution of two essential aspects of the Generic Model of Psychotherapy (Orlinsky & Howard, 1987) to outcome, namely the therapeutic bond (therapeutic alliance; group climate) and therapist interventions (homework assignments; transference work).

5.4 Further research

The appropriateness of the GCQ-S as a measure of group climate in cognitive behavioural group therapy has only been examined in one randomized controlled trial, and there is a need for replications before any definitive conclusions regarding its usefulness may be drawn. Future studies should try to include repeated measures of the GCQ-S from different treatment phases (early, middle, late), recruit other patient samples (e.g., depressive disorders, obsessive-compulsive disorder, panic disorder, personality disorders) as well as include a sufficient number of groups to examine inter-group differences more thoroughly. Therapist interventions and patient characteristics that influence and possibly enhance (or deteriorate) the group climate should also be explored, as well as dimensions of the group climate that may possibly predict patient drop-out.

Future research on therapist competence in assigning homework in CT should examine the relationship between homework assignments and outcome in more detail, using a repeated measures design (early, middle, late) as well as different patient samples. The inclusion of a measure of patient engagement with homework tasks is also of vital importance, to arrive at a better understanding of how this eventually impacts on the quality

of homework assignments. More research addressing therapist factors that may influence therapist competence in assigning homework, including training and experience level, is also needed. Additional research from diverse theoretical orientations (e.g., psychodynamic; experiential/ humanistic) is needed in order to establish that the use of homework assignments may be considered a common factor associated with beneficial treatment outcome.

In terms of further research on the effects of transference work, it is important to replicate the findings from the present study. Future studies should consider including additional outcome measures, as well as different diagnostic samples. It is also of interest to examine the effect of transference work in a later treatment phase (mid- or late phase), as the use of this intervention may then be more beneficial. Additional research is also needed that examines other potential moderators of the effect of transference work, such as the patients' immediate, in-session response to the intervention.

6.0 References

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Paper I

Perceived Group Climate as a Predictor of Long-Term Outcome in a Randomized Controlled Trial of Cognitive-Behavioural Group Therapy for Patients with Comorbid Psychiatric Disorders

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Background: Research on group therapy indicates that various dimensions of the helpful relationship qualities (cohesion, climate, empathy, alliance) are associated with outcome. However, the use of a wide variety of empirical scales makes comparisons between studies as well as generalizations somewhat difficult. Although a generic, trans-theoretical measure such as the Group Climate Questionnaire-Short Form (GCQ-S; MacKenzie, 1983) is available and applicable to most treatment conditions, it has never been tested with cognitive-behavioural group therapy. **Aims:** To investigate perceived dimensions of group climate (engagement, avoidance and conflict) as predictors of long-term (1 year) follow-up in a manualized, structured time-limited cognitive-behavioural group therapy (CBGT) for out-patients with comorbid psychiatric disorders. **Methods:** Data from 27 patients were analysed using hierarchical multiple regression analyses. Outcome measures used were general symptomatic complaints (SCL-90-R), interpersonal problems (IIP-64), specific mood- and anxiety symptoms (BDI; BAI) and early maladaptive schemas (YSQ). After controlling for scores on the relevant dependent variables at both intake and treatment termination, dimensions of group climate measured close to termination were entered as predictors in separate analyses. **Results:** Higher ratings of engagement were associated with reduced scores on all outcome measures at follow-up, except for anxiety symptoms (BAI). Higher ratings of avoidance were associated with lower anxiety symptoms at follow up, whereas ratings of conflict were unrelated to all follow-up scores. **Conclusions:** The results provide partial support for the use of the GCQ-S as a predictor of long-term follow-up in CBGT, and highlights perceived engagement as the most important dimension. Clinical implications are discussed.

Keywords: Group climate, long-term outcome, cognitive-behavioural group therapy.

Introduction

The therapeutic relationship has long been held to be an important factor contributing to both process and outcome in psychotherapy. Previous meta-analytic reviews have demonstrated that the alliance is consistently related to treatment outcome in individual psychotherapy, across treatment modalities and patient populations (Horvath and Symonds, 1991; Martin, Garske and Davis, 2000). Although different theoretical conceptualizations as well as empirical

instruments of the alliance have been developed, they all seem to capture a similar global quality of the alliance and predict outcome equally well (Martin et al., 2000).

The construct of the alliance is usually described in dyadic terms, tapping into the quality of the relationship between a therapist and a patient. Since group therapy unavoidably involves a larger set of people, as well as different treatment structures compared to individual therapy, constructs such as *climate* (a sense of constructive interpersonal investigation), *cohesion* (a sense of belonging) and *empathy* (a sense of being understood) have all been suggested to tap into important relationship qualities in this treatment modality (Johnson, Burlingame, Olsen, Davies and Gleave, 2005). The construct of the alliance has also been adapted to be used in group treatment settings. Theoretically, they have all been suggested to be important indicators of the quality of the relationships between group members, to be a “substrate” for work in the group and to foster the development of other positive therapeutic processes (MacKenzie, 2000; Tschuschke and Dies, 1994). For example, a high sense of cohesion or engagement may represent patients’ greater involvement in work-related tasks, thus increasing benefits from the group (Ogrodniczuk and Piper, 2003). Moreover, others (e.g. Yalom and Leszcz, 2005) have also suggested that it is precisely the therapeutic relationships and interpersonal exchanges between group members that are the curative ingredients in effective group therapy, causing a positive outcome.

The therapeutic relationship in group therapy can thus be conceptualized as necessary prerequisites for method-specific therapeutic techniques or tasks to be implemented (that is, not curative in and of itself), or as having a direct causal effect upon outcome (curative in and of itself). These two theoretical positions largely parallel the distinction between process-groups, usually placing a high value on the interpersonal and interactional climate of the group (the group processes being the vehicle of change), and more highly-structured approaches such as cognitive-behavioural group therapy. In the latter treatment model, more attention is usually given to pre-planned, highly structured in-session activities that focus on specific change strategies, for example cognitive restructuring. Relatively little attention is given to the unique properties of the group format or atmosphere, such as cohesion or engagement, as important vehicles for treatment process and outcome (Burlingame, MacKenzie and Strauss, 2004).

In contrast to the construct of the alliance in individual therapy, no overall consensus has yet been reached as to the most appropriate definition of the helpful relationship qualities in group therapy (Johnson et al., 2005; Joyce, Piper and Ogrodniczuk, 2007). The use of divergent constructs (cohesion, climate, empathy, alliance) is one source of this conundrum. Varying definitions of the same construct have been given, or constructs have been used interchangeably (e.g. MacKenzie, 2000). The proliferation of different empirical instruments has also been a problem, with many of them used in only a few studies (Burlingame et al., 2004).

Overall, the concept of cohesion seems to have been the most preferred term, but reviewers (Bednar and Kaul, 1994; Dion, 2000) have been led to conclude that there is little cohesion in the cohesion literature. Some have suggested that the cohesion-construct is too vague and amorphous to be useful as a unitary construct (Hornsey, Dwyer and Oei, 2007), but others caution against the development of new instruments since this may not resolve the underlying difficulties (Johnson et al., 2005). Interestingly, a recent multilevel structural equation model analysis suggests that the constructs of group climate, cohesion, alliance and empathy may all reflect one or more higher order constructs, which may be more related than prior evidence or clinical theory suggests (Johnson et al., 2005).

Empirical research on the association between the various therapeutic relationship qualities and outcome in group therapy has produced more mixed results compared to research on the association between the alliance and outcome in individual therapy. The cumulative empirical evidence for a positive association between group cohesion and treatment outcome is overall not particularly strong, which is puzzling in light of the widely held belief that group cohesion is the quintessential process variable in group therapy (Taft, Murphy, King, Musser and DeDeyn, 2003). This probably reflects some of the difficulties in reaching an overall agreement on a definition, the use of different instruments as well as differences in measurement approaches, which makes comparisons between studies difficult. Some studies on analytic- and dynamic treatment models have suggested a positive relationship between group cohesion and treatment outcome with varying groups and patient problems, such as anxiety and depression (Budman et al., 1989), complicated grief (Joyce et al., 2007) and neurotic and personality disorders (e.g. Tschuschke and Dies, 1994; MacKenzie and Tschuschke, 1993). Other studies have reported negative findings (e.g. Gillaspay, Wright, Campbell, Stokes and Adinoff, 2002; Lorentzen, Sexton and Høglend, 2004; Marziali, Munroe-Blum and McCleary, 1997).

Cognitive-behavioural therapy is often characterized as placing less emphasis on the therapeutic relationship and more focus on specific techniques and tasks as the central ingredients of effective therapy, compared to dynamic- or experientially oriented therapies. Interestingly though, studies on this usually highly structured treatment model have also produced some positive results. For example, groups with higher levels of cohesion were found to have greater improvement up to 6 months after treatment of agoraphobia compared to groups with lower cohesion (Hand, Lamontagne and Marks, 1974). Moreover, higher levels of cohesion have been found to be predictive of lower physical and psychological abuse at follow-up in abusive men (Taft et al., 2003), to be related to decreased post-treatment systolic and diastolic blood pressure, as well as improved quality of life in patients with cardiac disease (van Andel, Erdman, Karsdorp, Appels and Trijsburg, 2003) and early group cohesion has been found to predict better outcome in binge eating disorder (Castonguay, Pincus, Agras and Hines, 1998). Increase in group cohesion has also been related to improvements in social anxiety in a naturalistic study (Taube-Schiff, Suvak, Antony, Bieling and McCabe, 2007), although another study failed to report any effect with a similar diagnostic sample (Woody and Adessky, 2002). Also, a transdiagnostic CBT-treatment model recently reported increase in group cohesion to be related to a better treatment outcome (Norton, Hayes and Springer, 2008).

Taken together, the empirical evidence mostly indicates a positive association between relationship qualities such as cohesion and outcome in CBT-based group treatments, which highlights the importance of such factors even in highly structured treatment approaches. This is also in accordance with findings from comparative trials in individual psychotherapy, where the quality of the alliance has been found to be both equally strong in CBT-oriented therapies, and to predict treatment outcome equally well, compared to dynamic- and experiential therapies (Marmar, Gaston, Gallagher and Thompson, 1989; Salvio, Beutler, Wood and Engle, 1992; Spinhoven, Gisen-Bloo, Dyck, Kooiman and Arntz, 2007). This indicates that an emphasis on pre-planned, highly structured in-session activities, and a directive therapist stance, does not necessarily undermine the importance of relationship factors in therapy. On the contrary, studies even suggest that more structure, especially in the early phase of group treatment, may improve cohesion (Stockton, Rhode and Haughey, 1992).

One way to solve some of the problems related to research on the association between the helpful relationship qualities and outcome in group therapy would be to use a generic, trans-theoretical measure that is applicable to most treatment conditions. This would obviously facilitate comparisons between studies, opening up for broader generalizations in this field of research (Burlingame et al., 2004). The Group Climate Questionnaire-Short Form (GCQ-S; Mackenzie, 1983) is one such instrument, which in addition to a measure of cohesion or (a) *engagement* includes two other subscales called (b) *avoidance* (to what extent group members avoid responsibility for the change process in the group) and (c) *conflict* (taps into a sense of tension and conflict in the group). Higher ratings of engagement and lower ratings of both avoidance and conflict is usually thought to be associated with a positive treatment outcome.

Although extensively used across a variety of treatment settings and patient populations, the instrument has only been used in one randomized and controlled trial (Ogrodnizcuk and Piper, 2003). One of the main findings from this study was that higher ratings of engagement after session four, and averaged over the course of therapy, were directly associated with in-treatment improvement in two forms of short-term dynamic psychotherapy with complicated grief patients. Increase in engagement throughout treatment did not predict outcome. Generalizations from this one study to other treatment modalities as well as patient populations are somewhat limited. Also, it is uncertain whether dimensions of group climate may predict long-term follow-up.

The primary objective of the present study was therefore to examine the predictive validity of the GCQ-S for long-term follow-up in a different and more structured group treatment modality (CBT) using a more heterogeneous patient sample and other outcome measures. We hypothesized that (1) higher ratings of engagement, (2) lower ratings of avoidance, and (3) lower ratings of conflict would predict an overall better one-year follow-up.

Method

Procedure

Data used in the present study were taken from a randomized controlled trial investigating the effectiveness of cognitive-behavioural group therapy with comorbid psychiatric disorders. A detailed description of the original design and methodology is presented by Hagen, Nordahl, Kristiansen and Morken (2005). The treatment was found to be effective compared to waiting list controls, with effects upheld at 6 and 12 months follow-up (Hagen et al., 2005). Data from both treatment arms were combined in the present study.

Patients

All patients were diagnosed according to the DSM-IV system using the Structured Clinical Interview for the DSM-IV axis I (First, Spitzer, Gibbon and Williams, 1995) and axis II (First, Spitzer, Gibbon, Williams and Benjamin, 1994). Patients with active substance abuse, psychosis, suicidal behaviour and cluster A or B personality disorders were excluded. Patients were randomized to either a cognitive behavioural group therapy program or a waiting list condition, with six groups comprising 5–8 patients. Thirty-two patients completed 8 weeks of therapy. In the present study, two patients were excluded due to missing group climate

Table 1. Demographic and diagnostic variables for the sample

Variable	(<i>n</i> = 27)
Age (Mean, <i>SD</i>)	37.2 (10.2)
Females	22
Males	5
Diagnoses (<i>n</i>)	
Anxiety disorders	40
Depressive disorders	13
Eating disorders	3
Cluster C personality disorder	7
Total Axis I	56
Total Axis II	7
Total number of diagnoses	63

Note: Each patient could receive more than one diagnosis.

data, and three more patients were excluded due to missing outcome data leaving a sample of $n = 27$ for further analysis. Of these, one patient did not complete the conflict scale on the process measure. A detailed description of demographic and diagnostic variables of the sample is presented in Table 1.

Treatment

The treatment manual (Cognitive-Behavioural Group Therapy for comorbid psychiatric disorders) was based on a modified version of the manual developed by Free (1999). Work with the ABC-model, role-play, in vivo exposure and developing coping strategies to prevent relapse were central ingredients. The program thus provided a mix consisting of psycho-education related to depression and anxiety, group exercises and homework tasks. Overall, the treatment manual highlights the importance of structured therapeutic tasks as the central curative components of treatment. Qualities related to the therapeutic relationships are seen as important, but not hypothesized to be a central curative pathway. Treatment duration was 8 weeks, with two weekly held sessions of about 90 minutes duration.

Therapists

Two experienced female cognitive therapists led the treatment groups, and they had weekly supervision by one of the authors (HMN). The competence of the therapists was evaluated according to the Cognitive Therapy Scale (Young and Beck, 1980), using video-recordings of the third and tenth treatment-sessions. Competence is rated on a 7-point Likert scale, ranging from zero (low competence) to six (high competence). The two therapists in the original study received an overall mean score of 4.18 ($SD = .32$) and 4.05 ($SD = .29$), respectively, which is considered acceptable levels of therapist competence in cognitive therapy (Vallis, Shaw and Dobson, 1986).

Outcome measures

The outcome measures included in the original trial were also used in the present study (except for the sociotropy-avoidance scale; Beck, Epstein, Harrison and Emery, 1983), using pre, post and 12-month follow-up scores. The outcome measures were as follows:

The Inventory of Interpersonal Problems (IIP-64; Horowitz, Rosenberg, Baer, Ureño, and Villaseñor, 1988), based upon the work of Alden, Wiggins and Pincus (1990). This self-report instrument consists of 64-items in which 8 subscales are conceptually organized in a circumplex manner along two, main dimensions (dominance; love). Patients are asked to rate interpersonal behaviour that is “hard for you to do” or “you do too much” on a 5-point Likert scale ranging from 0 = Not at all to 4 = Extremely. The global index of interpersonal problems was used. Reliability and validity of the instrument is reported as acceptable (Horowitz et al., 1988).

The Symptom Checklist 90-Revised (SCL-90-R; Derogatis, 1983) was used to measure general psychiatric complaints. This is a 90-item self-report instrument where patients are asked to rate symptoms on a 5-point Likert scale ranging from 0 = None to 4 = Extreme. The General Symptom Index was used, and the SCL-90-R has been shown to have good psychometric properties (Bech et al., 1992).

The Beck Depression Inventory (BDI; Beck, Rush, Shaw and Emery, 1979) is a 21-item self-report instrument that measures depression during the last week. It has been shown to be both a reliable and valid measure of depression severity in both clinical and non-clinical populations (Beck, Steer and Garbin, 1988).

The Beck Anxiety Inventory (BAI; Beck, Epstein, Brown and Steer, 1988) is a 21-item self-report instrument that measures anxiety severity for the past week. The instrument is established as a reliable and valid measure of anxiety, and often recommended as a companion instrument to the BDI (Beck and Steer, 1993).

The Young Schema Questionnaire (YSQ; Young, 1994) is a 205-item self-report questionnaire that measures 16 early maladaptive schemas. Items are answered on a 6-point Likert scale, ranging from 0 = Almost never true on me to 5 = Almost always true on me. For the current study, the total score was used. YSQ has demonstrated good levels of psychometric properties and clinical utility (Schmidt, Joiner, Young and Telch, 1995).

Process measure

The Group Climate Questionnaire – Short Form (GCQ-S; MacKenzie, 1983) is a 12-item self-report measure that assesses individual group members’ perceptions of the group’s therapeutic environment. Each statement is rated on a 7-point Likert scale, ranging from 0 = Not at all to 6 = Extremely. The GCQ-S consists of three factor-analytically derived subscales: (a) *Engagement* (5 items that call for ratings on self-disclosure, cognitive understanding and confrontation); (b) *Avoidance* (3 items – to what extent the group member avoids responsibility for their change processes); and (c) *Conflict* (4 items – measures interpersonal conflict and distrust between group members as well as withdrawal). The instrument is not based on any particular theoretical orientation, and is thus applicable to many different group situations and formats. The GCQ-S has been widely used across different treatment populations, and its construct validity has been tested extensively (Kivlighan and Goldfine, 1991; Tschuschke and Greene, 2002). Internal consistency of the GCQ-S subscales has been shown to be high, with

alpha coefficients ranging from .88 to .94 (Kivlighan and Goldfine, 1991). Patients completed the GCQ-S the week before termination.

Results

Preliminary analyses

First, a one-way analysis of variance (ANOVA) was computed to investigate potential statistical significant differences between the groups in terms of overall quality of group climate. No statistical significant differences were found between the groups in terms of Engagement ($F = 2.69, p = .06$), Conflict ($F = .25, p = .91$) or Avoidance ($F = 2.39, p = .08$). It was thus deemed appropriate to analyse the whole sample, while not controlling for group condition. Descriptive analysis of each subscale on the GCQ-S revealed the following scores: Engagement ($n = 27$) $M = 3.9$; $SD = 0.7$; Avoidance ($n = 27$) $M = 2.3$; $SD = 0.7$; Conflict ($n = 26$) $M = 0.5$; $SD = 0.3$. Further analyses (Pearson's r) revealed that neither pre- nor post treatment scores on any of the outcome variables correlated significantly with any of the group climate variables ($p > .05$).

Main analyses

Next, in order to assess the relationship between ratings of group climate and long-term follow-up outcome, a series of hierarchical multiple regression analyses was computed. In each regression model, pre- and post treatment scores of the outcome variable were entered in the first two steps to partial out potentially confounding effects. Subsequently, each of the group climate variables (engagement; avoidance; conflict) were entered one at a time in step three in separate analyses for each outcome variable. Due to a large number of analyses, a conservative α of $p < .01$ was used in the analyses. A summary of step three is presented in Table 2.

As shown, higher ratings of engagement were associated with better follow-up outcomes on all outcome measure except the BAI. Higher ratings of avoidance predicted a statistically significant reduction in anxiety symptoms at follow-up. Ratings of conflict did not predict follow-up outcome. Moreover, the analyses revealed that pre-scores on all outcome measures were statistically related to follow-up scores ($p < .01$). For the post-outcome scores, only the SCL-90-R was statistically related to follow-up scores ($p < .01$).

Discussion

This was the first study to investigate the predictive validity of a measure of group climate (GCQ-S) for long-term (1 year) follow-up in a randomized controlled trial of cognitive-behavioural group therapy. Overall, the findings indicated that higher ratings of engagement were strongly related to a favourable one-year follow-up outcome on nearly all outcome measures. This finding is consistent with the results of some previous studies using the GCQ-S with non-psychiatric samples (Braaten, 1989; Kivlighan and Lily, 1997; Kivlighan and Tarrant, 2001). It also extends the results from the study by Ogrodniczuk and Piper (2003) by showing engagement or cohesion to be an important predictor for long-term follow-up in a highly structured treatment like CBT-group therapy and with a different diagnostic sample.

Table 2. Prediction of one year follow-up using the Group Climate Questionnaire-Short form

Step	Variable	B	SE	β	95 % confidence interval of B			ΔR^2	ΔF	d	Dependent variable
					Low	High	High				
3	Engagement (n = 27)	-.08	.02	-.53	-.11	-.04	.26	18.57***	1.66	SCL-90-R 1 year follow-up	
3	Avoidance (n = 27)	-.05	.03	-.29	-.11	.01	.08	3.60	0.73		
3	Conflict (n = 26)	.01	.07	.03	-.12	.15	.00	.04	0.08	IIP-64 1 year follow-up	
3	Engagement (n = 27)	-.07	.02	-.42	-.12	-.03	.17	12.57**	1.37		
3	Avoidance (n = 27)	-.01	.04	-.05	-.08	.06	.00	.10	0.12		
3	Conflict (n = 26)	.09	.07	.19	-.05	.23	.04	1.65	0.50	BDI 1 year follow-up	
3	Engagement (n = 27)	-1.20	.28	-.59	-1.78	-.62	.34	18.31***	1.65		
3	Avoidance (n = 27)	-.69	.46	-.28	-1.65	.26	.07	2.26	0.58		
3	Conflict (n = 26)	.16	1.07	.03	-2.06	2.39	.00	.02	0.06	BAI 1 year follow-up	
3	Engagement (n = 27)	-.76	.46	-.27	-1.72	.19	.07	2.75	0.64		
3	Avoidance (n = 27)	-1.73	.56	-.50	-2.88	-.58	.20	9.68**	1.20		
3	Conflict (n = 26)	.44	1.39	.06	-2.44	3.33	.00	.10	0.13	SQ 1 year follow-up	
3	Engagement (n = 27)	-2.10	.59	-.50	-3.31	-.89	.23	12.83**	1.38		
3	Avoidance (n = 27)	-.26	.87	-.05	-2.05	1.54	.00	.09	0.11		
3	Conflict (n = 26)	2.64	1.53	.25	-.53	5.82	.06	2.98	0.68		

Note: **p < .01. ***p < .001; d = Cohens' effect size ($d = 2r/\sqrt{df}$) ($d > .5$ = medium effect size, $d > .8$ = large effect size)

Mackenzie (1983) has argued that engagement captures many of the essential elements of cohesion, and may be described as an indicator of the *positive bonding relationship* that is usually thought of as a necessary ingredient in any effective therapy. Further, engagement might also be said to reflect work and self-disclosure among the members, as well as group members' attempts to understand the meaning of their behaviour. Positive change is more likely to occur with these behaviours (Ogrodniczuk and Piper, 2003). Clearly, a positive working atmosphere seems important for a positive outcome, and the usually limited time available in short-term group treatment may well function as a positive catalyst for the development of engagement. A strong-enough sense of engagement may be a necessary and critical ingredient for change to take place, although it is not necessarily an *increase* in engagement or other relationship qualities throughout the treatment process that causes therapeutic change (Ogrodniczuk and Piper, 2003; Lindgren, Barber and Sandahl, 2008).

Our findings add to the study of Ogrodniczuk and Piper (2003) by demonstrating that *perceived* engagement may not only be predictive of in-treatment change, but also of long-term follow-up in a different treatment modality and with a different diagnostic sample. Although Ogrodniczuk and Piper (2003) compared short-term interpretive- and supportive dynamic therapies, which are technically different, one similarity between them is that they both rely heavily on the material that patients bring into treatment. That is, patients are encouraged to contribute actively to both the content and process of therapy, sessions are not highly structured and therapists are usually not very directive. CBT-oriented group treatments, on the other hand, are usually more structured from session to session, therapists are encouraged to be active and a heavy emphasis is placed on the implementation of pre-planned therapeutic tasks as well as homework assignments (Beck et al., 1979). The present study indicates that although CBT-based group treatments may be technically different from dynamic- and experiential therapies, relationship factors such as cohesion or engagement may still be important for treatment outcome.

The question arises, however, in what way engagement is related to outcome and, in turn, how engagement relates to the use of specific techniques. Should engagement be characterized as *causing* a positive outcome, being *the result* of prior, in-treatment symptom reduction or therapeutic gains, or simply (spuriously) *correlated* with outcome. A similar discussion has received much attention in the alliance-research literature in individual therapy, with authors advocating all three positions (Baldwin, Wampold and Imel, 2007; Barber, Connolly, Crits-Christoph, Gladis and Siqueland, 2000; DeRubeis and Feeley, 1990). As recently argued by Hatcher and Barends (2006), this debate may be the result of confounding two different levels of analyses since alliance and technique occupy different conceptual levels and cannot be considered to be two different types of activity in therapy. Technique is an activity, alliance is a way to characterize activity. Since engagement largely parallels the concept of the alliance, we caution somewhat against interpreting the results from the present study as indicating that the use of technique is unimportant. Probably, technique and relationship factors interact and are catalytic to each other both in terms of process and outcome (Safran and Muran, 2000).

Ratings of engagement were not predictive of anxiety-symptoms at follow-up, which is an important qualification to the aforementioned general effect of perceived engagement on outcome. This points to a potential limit of the effect of the therapeutic relationship that warrants further research. Moreover, contrary to our second prediction, higher ratings of avoidance were associated with reduced anxiety-symptoms (BAI) at follow-up. This finding came as a surprise, since higher ratings of avoidance are usually thought to capture a sense of

lack of personal commitment to the therapy process (MacKenzie, 1983). Further, although not statistically significant, similar trends between higher ratings of avoidance and better outcomes were apparent at follow-up for all other outcome measures as well (see Table 2).

A closer inspection of the three items comprising the avoidance dimension on the GCQ-S indicates a possible answer, and points to potential important structural differences between CBT based group therapy, on the one hand, and more dynamic- and experiential therapies on the other. For example, item 5 on the GCQ-S asks the patient to what extent the members of the group depended on the group leader for direction in the treatment process. Although a higher score may be seen as avoiding personal responsibility in the change process in dynamically oriented treatments, it is actually in accordance with what one would expect as appropriate patient behaviour in a CBT-oriented group treatment. In CBT, the therapist is supposed to be active and directive, and to structure each session carefully. Moreover, item 9 asks to what extent the group members appeared to be doing things the way they thought would be acceptable to the group. A higher score here is also thought to indicate less commitment to the therapy process, but actually makes sense if group members are supposed to be engaged in a pre-planned structured task. A low score might actually be indicative of being at odds with the rest of the group, or possibly of introducing a personal agenda in the therapy process. Conclusively, this finding indicates that ratings of the avoidance dimension may be partly dependent on the specific treatment structure, and should caution therapists and researchers against interpreting the scores in a context-free fashion.

Lastly, we did not find any support for our third hypothesis, namely that lower ratings of conflict would be related to an overall better one-year follow up. Ratings of conflict were unrelated to follow-up outcome, which may actually reflect an overall low level of conflict at this treatment phase (termination). The non-significant finding may also stem partly from positive therapist behaviours, reducing tension and aggression within the group. However, since the drop-out rate in the original study was 30%, another hypothesis is that patients experiencing a high level of conflict would already have terminated treatment and be considered non-completers. This would obviously restrict the range of scores, making it difficult to establish any statistical significant associations between the variables. Since perceived group climate was measured the week before termination, it was not possible to investigate this hypothesis post-hoc.

It is important to bear in mind that the present study measured patients' perceptions of the group climate, which is subjective and personal, and may or may not reflect "the real" group climate. The results indicate that patients in the same group may have quite different experiences and perceptions of the group climate, which highlights the important intrapersonal elements of the group climate, or member-to-group experience (Burlingame, Fuhriman and Johnson, 2002). This should also caution therapists against using solely their own judgement or "gut feeling" as an indicator of the group climate. Moreover, it is also important to note that groups may differ in terms of overall group climate. Indeed, there was a trend in that direction in terms of engagement ($p = .06$) and avoidance ($p = .08$), although not statistically significant. This indicates that although there is an important subjective dimension to the experience of group climate, some groups do probably have an overall more favourable group climate than others.

The finding that perceptions of the group climate may be related to follow-up outcome has important clinical implications. First, developing a group climate where patients are active and engaged may be seen as perhaps a common therapeutic task in all group treatments, but do not necessarily conflict with the use of other modality-specific techniques or structured tasks. On the contrary, the heavy emphasis on structure and pre-planned in-session activities in

CBT-oriented group therapy may actually *propel* engagement as well as reduce anxieties and concerns about the treatment structure and process (Stockton et al., 1992). Providing a clear treatment rationale, setting an agenda and giving homework assignments are other examples of creating structure and engagement.

Second, therapists should try to identify patients that are relatively less engaged, since they are at risk for a poorer long-term follow-up. This is probably best achieved through collecting data on perceived group climate throughout the treatment process, on a session-by-session basis. Necessary steps should be taken to improve the conditions for patients at risk, depending on the patient's reasons for his or her lack of engagement. For example, if a lack of engagement is due to a perceived mismatch between the demands of a specific task and the personal resources available to the patient, the therapist could either provide the patient with additional help and support to master the task or, alternatively, reschedule for another and more manageable task. Alternatively, if the patient responds negatively to the group treatment structure because of issues related to autonomy, the patient might be rescheduled to individual therapy (Zettle, Halfich and Reynolds, 1992).

Limitations

One potential limitation of the present study was that group climate was measured at only one time point (the week before termination). Although we did control for symptoms at both intake and treatment termination, we can thus not completely rule out the possibility that ratings of group climate may have been related to prior symptom reduction. Second, although the patients did not receive any further formal therapy in the follow-up period, we do not know whether the patients had any informal contact with each other in that time period. Third, there is a risk that the results are somewhat overstated due to the fact that the group climate variables were treated as independent data, ignoring the group level. Fourth, dimensions of group climate may wax and wane throughout treatment, and be related to both process and outcome in more non-linear ways than suggested in this study, as hypothesized by MacKenzie (1983). Future studies should try to disentangle the relationship between improvement and group climate by including repeated measures. Lastly, patients' ratings of group climate may not necessarily reflect the "real" climate in the group, and it is important to note that the present study only examined patients' perceptions of the group climate as predictors of long-term outcome.

Conclusion

The study found partial support for the use of the GCQ-S as a predictor of long-term follow-up in CBGT for patients with comorbid psychiatric disorders. Perceived engagement was strongly related to most outcome measures, which underlines the importance of relationship factors in an otherwise highly structured treatment approach. However, the lack of support for the avoidance and conflict scales calls into question whether the GCQ-S is a fully appropriate measure for CBGT. Further research with repeated measures is needed to fully evaluate the usefulness of the GCQ-S in CBGT.

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Paper II



The Effects of Therapist Competence in Assigning Homework in Cognitive Therapy With Cluster C Personality Disorders: Results From a Randomized Controlled Trial

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Therapist competence in assigning homework was used to predict mid- and posttreatment outcome for patients with Cluster C personality disorders in cognitive therapy (CT). Twenty-five patients that underwent 40 sessions of CT were taken from a randomized controlled trial (Svartberg, Stiles, & Seltzer, 2004). Therapist competence in assigning homework was rated by 2 independent raters assessing a session early in treatment (mostly Session 6) using the Cognitive Therapy Scale (CTS; Young & Beck, 1980). Higher ratings of therapist competence in assigning homework predicted a positive outcome at both mid- and posttreatment, even when controlling for initial symptom improvement. The results indicated that therapist competence in assigning homework is important for both symptom reduction and personality change in CT in the treatment of patients with Cluster C personality disorders.

In one randomized controlled trial, cognitive therapy (CT) was found to be equally effective as short-term dynamic psychotherapy (STDP) with cluster C personality disorders (Svartberg, Stiles, & Seltzer, 2004), whereas in a second randomized controlled study cognitive-behavioral therapy was found to be more effective than a waiting-list control condition and brief dynamic therapy in the treatment of avoidant personality disorder (Emmelkamp et al., 2006). Although these studies clearly indicate that CT is effective with Cluster C personality disorders, it is essential to examine empirically the specific interventions that are hypothesized to be related to a positive treatment outcome in CT.

The use of homework assignments typically differentiates CT from more dynamically oriented treatment models in comparative trials (Goldfried, Castonguay, Hayes, Drozd, & Shapiro, 1997; Goldfried, Raue, & Castonguay, 1998; Svartberg et al., 2004). Relatively independent of whether the work is with Axis-I disorders such as depression, or Axis-II disorders such as Cluster C personality disorders, between-session activities are hypothesized to have a significant effect on treatment outcome in CT (Beck, Rush, Shaw, & Emery, 1979; Beck & Freeman, 1990). Homework has traditionally received little attention in descriptions of psychodynamic psychotherapy (Blagys & Hilsenroth, 2002).

However, the use of homework in psychotherapy has received increased attention from diverse theoretical orientations in recent years, including psychodynamic psychotherapy (Stricker, 2006). Moreover, a recent survey reported the use of homework assignments to be highly common across different theoretical orientations in routine clinical work (Kazantzis, Lampropoulos, & Deane, 2005). Some authors have therefore suggested that the use of homework may be considered a “common factor” across treatment modalities (e.g., Garfield, 1997; Kazantzis & Ronan, 2006), although there is likely to be a considerable variability in the type and the manner in which homework is integrated into treatments. Clearly, more empirical research is needed in order to demonstrate that the use of homework is associated with outcome across treatment orientations, especially in light of the fact that all previous research has been on cognitive-behavioral treatment models.

Studies on Axis-I disorders have mostly found a positive relationship between homework assignments (experimental designs comparing treatments with and without homework), compliance with homework assignments (single-group correlational designs) and improved treatment outcomes in cognitive and behavioral therapy, as demonstrated in a recent meta-analysis (Kazantzis, Deane, & Ronan, 2000). Shortcomings have been noted, though, including a lack of measures of therapist competence in homework administration (Kazantzis et al., 2000). According to Beck and associates (Beck et

al., 1979; Beck & Freeman, 1990), therapist factors such as competence in assigning homework is hypothesized as crucial for both patient compliance and treatment outcome.

Essentially, therapist competence is related to the skillfulness with which a therapist administers a treatment. Adherence, or the degree to which a particular treatment has been delivered, is a necessary condition for competence, but does not guarantee competence (Barber, Liese, & Abrams, 2003). Competence may be conceptualized and measured both globally (e.g., "general therapist competence in CT") and more specific (e.g., "therapist competence in assigning homework"). Moreover, the skillfulness with conducting a specific treatment is usually conceptualized as distinct from other, more general and non-modality-specific therapist behaviors ("facilitative conditions") such as supportive encouragement, involvement, warmth, and rapport.

Only one previous study has examined the effect of therapist competence in assigning homework on treatment outcome in cognitive-behavioral therapy. The results indicated that higher therapist competence was related to improved outcome in the treatment of depression (Shaw et al., 1999). Moreover, related research from cognitive-behavioral therapy has found therapist competence in reviewing homework to be linked with homework compliance (Bryant, Simons, & Thase, 1999), and better treatment outcomes have been associated with specific therapist behaviors such as discussing barriers to completing homework for less involved clients and setting concrete goals (Detweiler-Bedell & Whisman, 2005). Thus, there is emerging evidence to suggest that therapist competence in assigning homework is related to both compliance and outcome in CT.

No studies have reported examining the effect of homework assignments on outcome with Cluster C personality disorders in CT. The aim of the present study was to examine the effects of therapist competence in assigning homework on treatment outcome in CT for patients with Cluster C personality disorders. Based on clinical theory and previous research, it was hypothesized that higher ratings of therapist competence in assigning homework would predict improved mid- and posttreatment outcome.

Method

Participants

Patients were taken from a previously published randomized controlled trial investigating the effectiveness of CT and Short-Term Dynamic Psychotherapy (STDP) with Cluster C personality disorders (Svartberg et al.,

2004). Only patients in the CT condition were included in the present study ($n=25$).¹

Therapists and Treatment

The CT treatments followed Beck and Freeman's treatment manual for personality disorders (1990), which conceptualizes these disorders as originating in pathological core beliefs. The therapist initially focused on the treatment of any existing Axis-I pathology, and then on recognizing, understanding, and evaluating core beliefs with the objective of shifting those belief structures to more adaptive forms. Therapists employed three main techniques: (a) guided imagery to help the patient understand how past and new experiences shape and maintain current beliefs; (b) homework assignments with a focus on trying out new adaptive responses; and (c) cognitive, behavioral, and emotion-focused techniques to dispute pathological beliefs and to develop new and more adaptive beliefs.

The CT therapists were six clinical psychologists. All were specialists in clinical psychology as approved by the Norwegian Psychological Association. All but one were full-time clinicians. Their general clinical experience ranged in length from 6 to 21 years (mean=11.2, $SD=4.3$), their experience with CT in general ranged from 1.2 to 9.8 years (mean=5.9, $SD=2.4$), and their experience with CT for personality disorders ranged from 1.2 to 7.5 years (mean=4.1, $SD=1.8$). Study-specific training consisted of weekly peer-based supervision meetings, and annual supervision seminars with visiting cognitive therapy experts (A. Freeman, J. Young, and J. Beck). Treatment integrity and adherence to the manual were closely monitored during the weekly supervision activities. Patients received 40 weekly, 50-minute sessions.

Further investigations of treatment integrity and differentiability between STDP and CT were undertaken using the Inventory of Therapeutic Strategies (ITS; Gaston & Ring, 1992). Two independent raters, with 2 and 4 years of clinical experience, familiar with both the CT and STDP treatment models and blind to treatment outcome, rated videotapes ($n=50$) of an early session, typically the sixth. Two-tailed t -tests showed that STDP and CT differed in their emphasis on supportive strategies ($t=2.2$, $df=48$, $p<.02$; cognitive therapy had the stronger emphasis), work with defences ($t=4.0$, $df=48$, $p<.001$; STDP had the stronger emphasis) and transference work ($t=3.33$, $df=48$, $p=.002$; STDP had the stronger emphasis), whereas the emphases were equally strong in both treatments in terms of work-enhancing strategies ($t=.03$,

¹Therapist competence in assigning homework was also measured in 25 patients undergoing STDP, but since no homework assignment was observed in this treatment condition, the mean competence rating was zero and thus not analyzed further.

$df=48, p=.5$). Interrater reliability (Pearson correlations) scores ranged from .65 to .83.

Measures

Treatment outcome. The Global Severity Index of the Symptom Checklist 90 Revised (SCL-90-R; Derogatis, 1983) was used to measure symptom distress. The mean scores of the 127-item version of the Inventory of Interpersonal Problems (IIP; Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988) were used to assess patient's interpersonal problems. Lastly, the Millon Clinical Multiaxial Inventory (MCMI; Millon, 1984) was used to assess personality pathology as reflected by the Cluster C personality disorder scales of avoidant, dependent-submissive, compulsive-conforming, and passive-aggressive. All outcome measures have been shown to have good psychometric properties (Bech et al., 1992; Horowitz et al., 1988; Millon, 1984). One patient did not complete the MCMI and was excluded from further analysis.

In addition, initial symptom improvement was measured after Session 4 using the Helping Alliance Questionnaire (HAQ; Luborsky, Crits-Christoph, Alexander, Margolis & Cohen, 1983). Previous analyses have shown this instrument to comprise items (6, 7, 8, 9, and 10) that explicitly assess early symptomatic improvement (Barber & Crits-Christoph, 1996), and the mean score to these items were used in the present study in post-hoc analyses.

Process

Therapist competence in assigning, monitoring, and reviewing homework was measured using the homework assignment subscale of the Cognitive Therapy Scale (CTS; Young & Beck, 1980). Competence is rated on a 7-point Likert scale ranging from 0 (*low competence*) to 6 (*high competence*), based on to what extent the therapist (a) reviewed previous homework and summarized progress made and conclusions drawn from the exercises, (b) provided a rationale for homework assignments and its intended goals, (c) assigned "custom tailored" homework, and (d) elicited reactions and possible difficulties that might arise for the patient.

Therapist competence in agenda setting was also measured with the CTS, using the 7-point Likert scale as described above. Ratings are based on to what extent the therapist (1) managed to establish an appropriate agenda with specific target problems to focus on during the session, suitable for the available time. Ratings took into account to what extent the therapist followed the agenda.

Two independent raters, with 2 and 4 years of clinical experience, familiar with the CT and STDP treatment models and blind to treatment outcome, rated videotapes ($n=50$) of an early session, typically the sixth, and assigned a global score to the two competence scores for each therapy case. The CTS has been reported to have

good psychometric properties (Vallis, Shaw, & Dobson, 1986), although problems with poor interrater reliability and concerns about the validity of the scale have been reported (see Kazantzis, 2003, for a review). Specifically, adherence and competence appear to be confounded on the scale. Revisions have been undertaken, such as the Cognitive Therapy Adherence and Competence Scale (Liese, Barber & Beck, 1995), demonstrating acceptable psychometric properties (Barber et al., 2003). However, the high correlation between adherence and competence ($r=.96$) demonstrates continuing difficulties in separating these constructs successfully. Both therapist competence in assigning homework and agenda setting was reliably rated in the Svartberg et al. (2004) study (Pearson correlations of $r=.74$ and $.77$ for the whole sample [$N=50$], respectively).

The rationale for choosing an early session (mostly Session 6) to code process variables was one of striking a balance between "too early" and "too late." The very first sessions of a CT treatment are likely to focus on presenting a treatment rationale, developing a case-formulation, and establishing a confident and trusting relationship, and may as such not be fully representative of a typical CT session in the more active treatment phase. Later sessions, on the other hand, are likely to be confounded with the effects of earlier improvements.

Results

Due to the fact that the present study was based on a small patient sample, preliminary analyses were undertaken to examine the presence of statistical outliers in the data-set that might have influenced the results. Based on visual inspections of scatterplots between therapist competence in assigning homework and change scores for the outcome measures (post-pre scores) at both mid- and posttreatment, two patients were identified using the SCL-90-R and IIP. One more patient was identified using the MCMI, and these patients were excluded in the respective analyses.

In order to assess the relationship between therapist competence in assigning homework ($M=2.2$; $SD=1.6$, range=0-5) and mid- and posttreatment outcome in CT, hierarchical multiple regression analyses were computed for each of the outcome variables at mid- (after Session 20) and posttreatment (after Session 40). In each regression model, pre-scores of the outcome variable were entered in the first step, and therapist competence in assigning homework in the second step for each outcome variable. A summary of the results is presented in Tables 1 and 2.

Higher ratings of therapist competence in assigning homework was related to statistically significant improved outcomes on all measures at both mid- and posttreatment. Post-hoc analyses revealed that all effects were statistically

Table 1
Predicting Mid-Treatment Outcome (symptoms and interpersonal problems) from competence in assigning homework

Step	Variable	B	S.E	b	95 % confidence interval of B		ΔR^2	ΔF	d	Dependent variable
					Low	High				
<i>SCL-90-R mid</i>										
1	SCL-90-R pre (<i>n</i> =23)	.79	.13	.72	.52	1.06	.67	41.85***	2.65	
2	Therapist competence in assigning homework	-.13	.05	-.30	-.24	-.02	.08	6.37*	1.13	
<i>IIP mid</i>										
1	IIP pre (<i>n</i> =23)	.63	.13	.63	.35	.90	.57	27.84***	2.07	
2	Therapist competence in assigning homework	-.11	.04	-.37	-.19	-.03	.12	7.56*	1.23	

Note. SCL-90-R=Symptom Checklist 90 revised; IIP=Inventory of Interpersonal Problems; d=Cohens' effect size ($d=2t/\sqrt{df}$) ($d>.05$ =medium effect size, $d>.8$ =large effect size).

* $p<.05$, *** $p<.001$.

significant ($p<.05$) even when controlling for initial symptom improvement after Session 4 using the HAQ. Moreover, therapist competence in agenda setting ($M=3.1$, $SD=1.6$, range=0.5 – 5) did not predict mid- or posttreatment outcome, nor did two measures of more global therapist behaviors as measured with the ITS (“supportive strategies” and “work enhancing strategies”).

Discussion

The present study is the first to examine early ratings of therapist competence in assigning homework as a

predictor of treatment outcome in CT with Cluster C personality disorders. Essentially, the results largely support the notion that a skillful and competent administration of homework is associated with an overall positive change over and above initial symptom improvement. More specifically, a significantly higher amount of change in both symptoms, interpersonal problems and Cluster C personality pathology was obtained with increasing levels of therapist competence in assigning homework.

The positive effects noted at mid-treatment reflects the rapid benefits of assigning homework in a competent

Table 2
Predicting Post-Treatment Outcome (symptoms, interpersonal problems and personality pathology) from competence in assigning homework

Step	Variable	B	S.E	b	95 % confidence interval of B		ΔR^2	ΔF	d	Dependent variable
					Low	High				
<i>SCL-90-R post</i>										
1	SCL-90-R pre (<i>n</i> =23)	.68	.12	.71	.43	.94	.64	37.02***	2.45	
2	Therapist competence in assigning homework	-.11	.05	-.29	-.23	-.02	.08	5.42*	1.04	
<i>IIP post</i>										
1	IIP pre (<i>n</i> =23)	.72	.17	.60	.36	1.07	.52	22.83***	1.81	
2	Therapist competence in assigning homework	-.12	.05	-.35	-.23	-.02	.11	5.62*	1.06	
<i>MCMI post</i>										
1	MCMI pre (<i>n</i> =23)	.76	.23	.53	.29	1.22	.40	13.68**	1.47	
2	Therapist competence in assigning homework	-13.65	5.50	-.39	-25.12	-2.18	.14	6.17*	1.11	

Note. SCL-90-R=Symptom Checklist 90 Revised; IIP=Inventory of Interpersonal Problems; MCMI=Millon Clinical Multiaxial Inventory; d=Cohens' effect size ($d=2t/\sqrt{df}$) ($d>.05$ =medium effect size, $d>.8$ =large effect size).

* $p<.05$, ** $p<.01$, *** $p<.001$.

manner in CT, in line with previous research showing both therapist competence in assigning homework (Shaw et al. 1999), as well as discussing barriers to completing homework for less involved patients and setting concrete goals (Detweiler-Bedell & Whisman, 2005), to be associated with improved outcomes in CT for depression. However, an additional finding in the present study was that therapist competence in assigning homework not only predicted symptom reduction at mid- and posttreatment, but also reduced levels of interpersonal problems at both mid- and posttreatment as well as significantly reduced Cluster C personality pathology at treatment termination. This underlines the importance of scheduling between-session activity in a competent manner early in treatment, even when working with patients with Cluster C personality disorders.

Therapist competence in assigning homework predicted outcome both at mid- and posttreatment, while therapist competence in agenda setting did not. Although we did not have any measure of general therapist competence in CT, which might hypothetically have influenced both, the results support the view that therapist competence in assigning homework is a rather specific skill not necessarily related to other measures of competence ("agenda setting") in conducting CT for Cluster C personality disorders. Moreover, further post-hoc analyses revealed that neither the use of supportive-nor work-enhancing interventions (as measured with the ITS) predicted mid- or posttreatment outcome. Although these ratings were based on the frequency of occurrence rather than quality, the results are noteworthy in accordance with the Shaw et al. (1999) study, failing to find any influence of general or non-modality-specific therapist behaviors (supportive encouragement, involvement, warmth, and rapport) on treatment outcome.

It is important to note that the present study highlights the *quality* in assigning, monitoring, and reviewing homework, and not its quantity, as crucial for treatment outcome. Although it can be argued that the concepts of adherence and competence to some extent are confounded (Kazantzis, 2003), adherence in-and-of-itself does not seem to predict treatment outcome (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996; Shaw et al., 1999) or compliance to homework (Startup & Edmonds, 1994) in CT. Two notable exceptions are the studies by DeRubeis and Feeley (DeRubeis & Feeley, 1990; Feeley, DeRubeis & Gelfand, 1999), in which adherence to some aspects of CT (including assigning homework) predicted treatment outcome. Likewise, only therapist competence was found to predict outcome in a study of psychodynamic therapy (Barber, Crits-Christoph & Luborsky, 1996), even though the measures of adherence and competence were highly correlated ($r = .60$). Thus, the cumulative empirical evidence adds confidence to the

suggestion that the concept of competence indeed captures an important qualitative dimension of an intervention missing in the concept of adherence.

The overall mean value for therapist competence in assigning homework was on the lower half of the competence scale as measured with the CTS. This finding is reminiscent of other randomized controlled studies also reporting surprisingly low competence scores when formally competent and experienced therapists are selected, trained, and closely monitored to assure acceptable levels of competence (e.g., Shaw et al., 1999). It is possible that therapists in the present study often underestimated the therapeutic value of assigning homework since the main aim of the treatment was to alter personality pathology, or in cognitive terms, to change core maladaptive beliefs.

Unfortunately, the present study did not examine to what extent therapist competence in assigning homework later in treatment predicts a positive outcome, especially in reducing levels of interpersonal problems and personality pathology. This is an important question since the focus later on in the treatment of patients with personality disorders is more directly aimed at changing maladaptive core schemas. Our prediction is, however, that therapist competence in assigning homework also is of therapeutic value then because an important schema-change mechanism is changing maladaptive behavior in the real world. A main schema-change strategy in CT for patients with personality disorders is to test both old maladaptive and new, more adaptive beliefs through behavioral experiments between sessions.

Although the present study was based on Beck's (Beck et al., 1979; Beck & Freeman, 1990) conceptualization of therapist competence as essential in assigning homework, it may also be useful to consider social cognition theory in discussing the results (Curtis, 1984; Horvath, 1993; Miller, 1985). As Bandura notes (1989), people have "self-efficacy beliefs" that influence their motivation to engage in actions necessary to obtain a specific goal. Such self-efficacy beliefs may be conceptualized as cognitive factors mediating the patient's motivation to engage in homework assignments, as well as learning experiences to be drawn from such tasks. Accordingly, successfully achieving previous homework assignments, as well as receiving encouragement and feedback from the therapist, may both enhance self-efficacy beliefs and strengthen adaptive, health-related behaviors (Kazantzis & L'Abate, 2005).

As noted in the introduction, it has been suggested that the use of homework may be considered a "common factor" in psychotherapy (e.g., Garfield, 1997; Kazantzis & Ronan, 2006). However, the relationship between homework assignments and outcome has not been examined outside cognitive-behavioral treatments in any previous research, and the use of homework assignments was not

identified in the STDP group in the present study. Although this does not rule out the possibility that patients may (spontaneously) have engaged in between-session activities beneficial for treatment outcome, the use of homework was not systematically integrated into the STDP treatment model. Clearly, although the use of homework may be common in routine clinical work (Kazantzis et al., 2005), more empirical research from diverse theoretical orientations is needed in order to establish that the use of homework may be considered a common factor associated with treatment outcome.

The present study has some methodological weaknesses worth noting. The CTS includes only one item related to therapist competence in assigning homework, which may obscure more fine-grained nuances related to the process of assigning, monitoring, and reviewing homework. Moreover, since competence ratings were assessed only once during an early session, it is unclear to what extent the rated session is representative of therapist competence in assigning homework in other treatment sessions. As there was no measure of client engagement in homework assignments, the effect of this on both therapist competence in assigning homework and outcome is unknown. It is also important to note that the HAQ is not a well-tested measure of symptom distress; our efforts to control for initial symptom improvement should thus be interpreted with caution. Lastly, therapists' age and experience level may also influence outcome, but was not examined.

In spite of these limitations, the present study empirically confirms the notion that therapist competence in assigning homework may play an important role for both symptom reduction and personality change in CT for patients with Cluster C personality disorders. This highlights the importance of devoting sufficient time to homework assignments at least in early phases of treatment.

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Paper III

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