### Supportive-Expressive (SE) Psychotherapy: An Update<sup>a</sup>

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Abstract: An updated review of Supportive-Expressive (SE) psychotherapy is presented. The concepts, techniques and research methods of SE therapy are described, and empirical evidence is reviewed. Articles on SE therapy published between 1970 and 2006 were identified by a computerized search using Pubmed, MEDLINE, PsycINFO and Current Contents. In November 2006, the search was updated using database-specific keywords. By this search, 92 individual studies or review articles on SE therapy were identified. In addition, text books and journal articles were used. Only publications referring to Luborsky's concept of SE therapy were included. The information was extracted by two raters. Sixty-seven publications addressing SE therapy according to Luborsky were included. Articles refering to conceptual (clinical) contributions and empirical research on concepts, processes and efficacy of SE therapy were reviewed. Results were summarized by two raters. Empirical data are in general consistent with the concepts of SE therapy. At present, a limited number of randomized controlled trials providing evidence for the efficacy of SE therapy in specific psychiatric disorders is available. Further efficacy studies are required. With regard to processes of SE therapy, studies addressing the interactions among supportive-expressive interventions, patient's level of functioning and outcome are recommended.

**Keywords:** Supportive-expressive psychotherapy, evidence, efficacy, review.

In the present article, an updated review of supportive-expressive (SE) psychotherapy [1] is given. Techniques, concepts and empirical evidence are presented. As will be shown below in more detail, SE therapy allows for the treatment of a wide range of psychiatric disorders.

In clinical practice, psychodynamic psychotherapy is one of the most commonly used methods of psychotherapy [2]. It is also one the most commonly used methods of personal therapy of mental health professionals [3]. However, psychodynamic psychotherapy has often been controversially discussed, especially with regard to the adequacy of empirical evidence. For example, short-term psychodynamic psychotherapy was judged as "probably efficacious" by the American Psychological Association's (APA) Task Force on Promotion and Dissemination of Psychological Procedures [4]. Updated reviews about the efficacy of psychodynamic psychotherapy in specific psychiatric disorders [5-7] as well as a meta-analysis of short-term psychodynamic psychotherapy [8] were recently presented. According to these reviews, there is a limited number of randomized controlled trials which provided evidence for the efficacy of psychodynamic psychotherapy in specific psychiatric disorders [5-7]. However, no two studies of independent research groups are available demonstrating efficacy of the same model of psychodynamic psychotherapy in the same psychiatric disorder [5,7]. This was the reason why short-term psychodynamic psychotherapy was judged as "probably efficacious" by the APA's Task Force. At present, ten years later, this judgement still holds true [5,7].

The different models of psychodynamic psychotherapy were described and compared in several reviews [9-11]. According to empirical data, there are some models of psychodynamic psychotherapy for which two or more randomized controlled trials in specific (though different) psychiatric disorders are available [5,7]. These are the models of Luborsky, Shapiro and Firth, Malan and Horowitz [1,12-14]. This article will focus on Luborsky's model of SE therapy. An updated review will be given for conceptual and clinical aspects (e.g. concept of conflict, techniques of SE therapy, disorder-specific treatment manuals) as well as for research on efficacy and processes of SE therapy.

#### **METHOD**

We collected articles on SE therapy that were published between 1970 and (May) 2006, carrying out a computerized search using MEDLINE, PsycINFO, and Current Contents. The following key words were used: supportive-expressive therapy, study, outcome, process, randomized controlled trial, efficacy. In November 2006, the search was updated using database-specific keywords. By this search, 92 individual studies or review articles on SE therapy were identified. In addition, text books and journal articles were reviewed. Only publications referring to Luborsky's concept of SE therapy [1] were included. Studies focusing on other models of supportive-expressive therapy were excluded, e.g. studies of Spiegel's model of supportive-expressive group therapy for patients with cancer [15]. The information was extracted by two raters. Seventy publications referring to concepts of Luborsky's SE therapy were included. The articles identified were reviewed with regard to clinical contributions (e.g. Core Conflictual Relationship Theme, supportive and expressive interventions, treatment manuals), and research on outcome and processes (e.g. on helping alliance treatment fidelity, curative factors) of SE therapy.

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<sup>&</sup>lt;sup>a</sup>We thank Dr. Luborsky (University of Pennsylvania) for helpful comments.

### SUPPORTIVE-EXPRESSIVE THERAPY: A SPECIFIC MODEL OF PSYCHODYNAMIC PSYCHOTHERAPY

Psychodynamic psychotherapies operate on a supportiveinterpretive continuum [1,16-21]. The concept of a supportive-interpretive (or supportive-expressive) continuum of psychodynamic interventions is empirically based on the data of the Psychotherapy Research Project of the Menninger Foundation [1,21-23]. Based on his work at the Menninger Foundation, Luborsky developed a specific model of psychodynamic psychotherapy including both supportive and expressive Interventions (SE therapy) [1] With regard to supportive interventions, the establishment of a helping alliance is regarded as a central component [1]. In SE therapy, expressive interventions are defined to enhance the patient's cognitive and emotional understanding of his or her present symptoms and of the underlying "Core Conflictual Relationship Theme" (CCRT) [1,24-28]. The concept of the CCRT will be presented below more in detail. For both supportive and expressive interventions, Luborsky has formulated a number of principles [1, p. 82-8, p.121, 94-141]. Meanwhile, manual-guided adaptations of SE therapy for a variety of specific psychiatric disorders are available including for depression, generalized anxiety disorder, bulimia nervosa, specific personality disorders or opiate and cocaine dependence [16,29-34]. Disorder-specific specifications of supportive and expressive interventions were described in the respective treatment manuals [16,30-35]. For example, a secure therapeutic alliance is regarded as particularly important in specific psychiatric disorders, e.g. in generalized anxiety disorder [16] or social phobia [36]. The interventions characteristic of SE therapy have been operationalized both by treatment manuals and by rating scales for adherence and competence [1,37-39]. In addition, a psychodynamic concept of psychopathology has been specified, the "Core Conflictual Relationship Theme" [1,24,25,40] (CCRT). Empirical research on supportive and expressive interventions as well as on the CCRT method will be reviewed below. SE therapy can be carried out both as a short-term and as a long-term treatment. Short-term treatments tend to be from 6 to 25 sessions [1]. Long-term treatment ranges from a few months to several years [1,17,18,32]. Differences to classical psychoanalysis, e.g. a more active stance will be described below. In the following, the concept and method of the CCRT will be described more in detail.

# UNDERSTANDING OF SYMPTOMS, CONFLICTS AND TRANSFERENCE IN SE THERAPY: THE CORE CONFLICTUAL RELATIONSHIP THEME (CCRT)

In psychodynamic psychotherapy psychiatric symptoms are regarded as determined by both biological and psychological factors [1,17,41]. With regard to their psychological aspects, psychiatric symptoms are conceptualized as the consequence of unresolved conflicts or of impairments in ego-functions (for the concept of ego-functions see, for example, Bellak, Hurvich and Gediman [42]. The psychodynamic concept of conflict was noted by Luborsky as a "Core Conflictual Relationship Theme" (CCRT) [1,24,28,40]. A CCRT consists of three components: a wish (W: "I wish that person X ..."), a response from the other (RO: "But person X will...") and a response from the self (RS: "Thus, I will..."). In this scheme, response from the self (RS) repre-

sents the patient's symptoms. For a patient with a social phobia, for example, the CCRT may be described in the following way [43]: "I wish to be at the center of the attention and to be affirmed by others (W). However, the others will disapprove of me (RO). I feel ashamed and get afraid of exposing myself, so I have decided to avoid exposing myself (RO, symptoms of social phobia)". The therapist's task is to identify the individual patient's specific CCRT that is associated with his or her present symptoms. The CCRT is used as the focus to which the therapist directs his or her interventions. Focusing on the respective CCRT is an essential and integral part of the disorder-specific manuals of SE therapy [16,30-35]. The CCRT represents a transference potential, a scheme including central wishes, anticipated reactions of others and from the self ("I wish that..., but the others will... So I will...") that will be reproduced repeatedly like a theme and variations of a theme in spite of its self-hurtful nature [1]. - Freud referred to the transference potentials as relationship "stereotype plates" [44]. The concept and method of CCRT is a useful instrument not only in psychotherapy research, but also in everyday clinical practice [40]. It allows for both to operationalize the concept of transference and to formulate a therapeutic focus. The emphasis that psychodynamic psychotherapy puts on the relational aspects of transference is a key technical difference to cognitive-behavioral therapies [45]. In SE therapy and in psychodynamic psychotherapy in general, transference is regarded as a primary source of understanding and therapeutic change [1,18]. Recent studies using the CCRT method will be reviewed below.

#### **EMPIRICAL EVIDENCES**

#### 1. Evidence for Efficacy

The computerized search yielded five randomized controlled trials of SE therapy [30,46-51] and one randomized controlled feasibility study [52]. In these studies the following psychiatric disorders were treated: opiate dependence [49-51], cocaine dependence [46,47], bulimia nervosa [30], personality disorders [48] and generalized anxiety disorder [52]. In the treatment of opiate addiction, SE therapy and cognitive-behavioral therapy (CBT) each of them combined with drug counseling were equally effective and both superior to drug counseling alone [49]. The pre-post effect sizes in target problems (drug-related outcome measures) at 7month follow-up were 0.97 for SE therapy, 0.81 for CBT and 0.07 for drug counseling alone.\* By subgroup analyses the effects of SE therapy in patients with comorbid antisocial personality disorder with and without a concomitant depression were examined [53]. Further subgroup analyses showed that patients with high symptom severity made little progress with drug counseling alone, but made considerable progress when SE therapy or CBT were added to drug counseling [54]. The efficacy of SE therapy in patients with opiate addiction was corroborated in another randomized controlled trial [50]. In that study, SE therapy combined with drug counseling was superior to drug counseling alone in the treatment of opiate addiction [50]. However, in a randomized controlled trial studying the treatment of cocaine dependence, SE therapy combined with group drug counseling,

<sup>\*</sup>Effect sizes were assessed by the authors (FL & EL) on the basis of the data published by the authors of the studies. In the following, effect sizes assessed by us are marked with an asterisc.

CBT combined with group drug counseling and group drug counseling alone, were equally effective, but they were inferior to individual drug counseling alone [47]<sup>b</sup>. SE therapy and CBT both combined with group drug counseling achieved large within group effect sizes [55, p. 40, 67], in target problems (drug-related outcome measures) both at the end of treatment and at 12-month follow-up (SE therapy: 1.43, 1.86; CBT: 1.57, 1.87)<sup>c</sup>. Individual drug counseling vielded the largest effect sizes (2.00, 2.14)\* The difference between SE Therapy and CBT both combined with group drug counseling on the one hand and group drug counseling on the other hand was small (d=0.15)\*. The hypothesis that psychotherapy is superior to drug conseling on associated features of drug- dependence was not corroborated [46]. Reduction in cocaine abuse was associated with an average 40% decrease in HIV risk across all treatments [56]. Individual and group drug counseling were associated with an equal or even greater reduction in HIV risk than the other treatment conditions. In another randomized controlled trial, SE therapy was compared with CBT in the treatment of bulimia nervosa [30]. With regard to target symptoms of bulimia nervosa (bulimic episodes, self-induced vomiting) SE therapy and CBT were equally effective [30]. The between group differences for target symptoms were not significant corresponding to a between group effect size of 0.24 in favor of CBT\*, which is a small effect [55, p. 40, 67]. However, CBT was superior to SE therapy in some specific measures of psychopathology [30]. In another randomized controlled trial, SE therapy was compared to nonmanulized community-delivered psychodynamic therapy in patients with personality disorders [48]. The latter treatment was carried out by experienced psychodynamic clinicians. Both treatments were equally effective and achieved a significant decrease in the prevalence of patients fulfilling criteria for personality disorder diagnosis, personality disorder severity and psychiatric symptoms. In both treatments the global level of functioning also improved significantly. During the follow-up period, patients who received SE therapy made significantly fewer visits to the involved community mental health centers than the patients who received nonmanualized communitydelivered psychodynamic therapy. For SE therapy the authors reported a large within group effect size for target symptoms (total number of DSM-IV axis II criteria) at follow-up (0.99) compared to 0.61 for the nonmanualized community-delivered psychodynamic therapy. For the general severity of psychiatric symptoms and global level of functioning, effect sizes of 0.72 and 0.64, respectively were reported for SE therapy (nonmanualized communitydelivered psychodynamic therapy: 0.87, 0.59). These effect sizes of SE therapy correspond by and large to those reported in a recent meta-analysis of short-term psychodynamic therapy [8]. That meta-analysis included four studies of SE therapy [30,46,47,49,50]. In a randomized controlled feasibility study of generalized anxiety disorder, SE therapy was equally effective as supportive therapy with regard to continuous measures of anxiety, but significantly superior on symptomatic remission rates (46% vs. 12%) [52]. However,

<sup>b</sup>We thank Dr. Crits-Christoph for providing the data to calculate effect sizes.

the sample sizes were relatively small (N=15 vs. N=16), and the study was not sufficiently powered to detect possible further differences between the treatments. A randomized controlled trial comparing SE therapy with medication and placebo in the treatment of major depression is presently being carried out (Dr. Barber, personal communication 2006-11-14). In another ongoing randomized controlled trial, SE therapy is being compared to CBT in the treatment of generalized anxiety disorder [57].

In several open trials SE therapy yielded significant improvements and large pre-post effect sizes\* in target problems between 0.89 and 2.85 in patients with major depression, patients with major depression and a concomitant personality disorder or patients with chronic depression [58,59], generalized anxiety disorder [60], or avoidant and obsessive-compulsive personality disorder [35]<sup>d</sup>.

To sum up, there is evidence for the efficacy of SE therapy, but presently it is limited and further studies are required.

#### 2. Evidence for the Concept and Method of the CCRT

Luborsky and his colleagues developed specific methods to assess the CCRT from the patients narratives about his or her interpersonal experiences. For these methods, sufficient reliability has been demonstrated [1,24,25,27,28,40,61,62]. Comparisons between the CCRT method and other methods of psychodynamic formulation were presented, for example, by Perry, Luborsky, Silberschatz and Popp [63]. In Germany, a modification of CCRT categories was presented [64]. A self-report questionnaire for the assessment of the CCRT showing acceptable psychometric properties was developed by Barber and colleagues [65-67]. Consistent with the theory of SE therapy, empirical studies have provided evidence that changes in symptom distress can be significantly predicted from changes in specific CCRT components [62,68,69]. Changes in the wish and in (negative) response of self significantly predicted change in symptoms [68]. As the RS component of the CCRT represents the patient's symptoms, a correlation with outcome is to be expected. The correlations were 0.41 and 0.40, respectively with initial levels of CCRT, symptom measures partialed out. Changes in overall mental health were only significantly correlated with changes in (negative) response of self (r=-0.53). These correlations correspond to a medium to large effect size [55, p.80] explaining between 16% and 28% of variance in outcome. However, even after successful therapy, the CCRT tends to remain recognizable [68]. The pattern of transference as assessed by the CCRT is still evident (i.e. is not resolved), but under better control and mastery [62]. Whereas the patient's wishes remained relatively consistent during treatment, changes were found in the response from the self and in the response from the other components of the CCRT. Negative responses from the self and from the others were reduced, positive responses from the others increased [68]. Furthermore, the patients' self-understanding (operationalized as the convergence between patients' statements about themselves with their independently established CCRT) was found to be significantly associated with outcome [62,69].

<sup>&</sup>lt;sup>c</sup>The difference between SE therapy and CBT both combined with group drug counseling on the one hand and group drug counseling on the other hand corresponds to a small effect size (d=0.15)<sup>\*</sup>.

<sup>&</sup>lt;sup>d</sup>We thank Dr. Barber for providing the data to calculate effect sizes for his study on personality disorders.

The concept and method of the CCRT has considerably stimulated research on psychodynamic aspects of psychiatric disorders. For example, several studies investigated CCRT patterns in specific diagnostic groups [70-73] in dreams and waking narratives [74], or examined the relationship of CCRT to psychopathology [75,76] or to patterns of attachment [77]. Recently, the CCRT method was applied in a nonclinical context to study the relationship between God and people in the Bible [78,79]. Further research should address if changes in the CCRT are specific to SE therapy or if they occur and are linked to outcome in other forms of psychotherapy as well (e.g. CBT or interpersonal therapy).

### 3. Evidence for the Concept and Method of Helping Alliance

Methods for the reliable assessment of the helping alliance have been developed including both the patient and the therapist perspective [80]. Consistent with assumptions of SE therapy, empirical studies have shown that the helping alliance significantly contributes to therapeutic success [27,62,69,80-83]. However, although the impact of the helping alliance on outcome is significant, it seems to be smaller than expected, and to be also dependent on patient group, treatment models and time of assessment [27,82,84-86]. In a study of SE therapy in patients with cocaine dependence, however, no correlation of the alliance to drug-related outcome of psychodynamic psychotherapy was found [84]. Furthermore, the assumption that accurate interpretations have their greatest impact in the context of a positive helping alliance was not corroborated by empirical data [87]. In a recent review, the alliance-outcome correlation was reported to range from 0.22 to 0.29 [86]. However, that review did not only include studies of SE therapy but also of other forms of SE psychotherapy. Thus, the results reported do not specifically refer to SE therapy. Future studies should address the interaction between the helping alliance, diagnostic group, treatment models, time of assessment and outcome, rather than the impact of single predictors alone [27,82,84-86]. Studies designed in that way will help to answer the question, whether the helping alliance is in itself a curative factor or whether it serves as the basis necessary for other therapeutic elements to become beneficial [86]. Future studies should also control for the methodological problem of a possible confounding between initial symptom improvement and helping alliance as well as between helping alliance and dispositional factors of patients and therapists [27]. In a methodologically careful study controlling for improvements in symptoms, the helping alliance predicted outcome in depressive symptoms beyond in-treatment change in symptoms [82]. Although only in SE therapy giving support has a prominent place in the treatment manuals, comparisons between SE therapy, CBT and other manual-guided treatments showed that other treatments used support to the same extent [39,88,89]. Giving support seems to be a common curative factor in psychotherapy. Meanwhile, the concept of a helping alliance originally developed in a psychodynamic context is studied in other forms of psychotherapy as well [85,86]. How therapists can be trained to develop a helping alliance with the patient is an important question in psychotherapeutic training [86].

### 4. Evidence for Adherence and Competence (Treatment Fidelity)

For SE therapy, reliable methods to assess the therapist's adherence to the treatment manual and the competent delivery of supportive and expressive interventions were developed [39,62,88]. By these scales, blinded raters successfully discriminated SE therapy from other forms of psychotherapy, such as CBT or interpersonal therapy [1,29,37-39,90]. The effects of training in SE therapy, CBT and drug counseling were studied by Crits-Christoph et al. [91]. According to the results, training in manual-guided treatments did not have a negative impact on the therapeutic alliance. Furthermore, differences concerning learning trends were found between SE therapy and CBT. In another study, therapist characteristics in training effects were assessed [92]. Higher competence ratings before training, for example, were associated with greater change in competence for SE therapy. For CBT therapists, more years of experience were associated with greater change in competence.

## 5. Supportive-Expressive Therapy Compared to Other Models of Psychodynamic Therapy

In several studies SE therapy was compared to other models of psychodynamic therapy with regard to therapist behaviour. In a study by Piper et al. [93], which used a model of psychodynamic psychotherapy based on recommendations by Malan and Strupp and Binder [13,94], therapists were less active and used more transference interpretations compared to the results reported by Connolly et al. [95] for SE therapy. The two studies used a comparable coding system for therapists' interventions. In an earlier study [1,81], therapist's behavior was compared for the Penn-VA study [39], the Yale Study [96] and for the Temple study [97]. Compared to the psychoanalytically oriented therapies of the Temple study, the therapists in the Penn-VA study who applied SE therapy used fewer interpretations (and clarifications). The latter result refers to interpretations (and clarifications) in general, not specifically to transference interpretations. Interpersonal therapy (IPT) applied in the Yale study was reported by Luborsky [1] to fall between the profiles of SE therapy and CBT. However, future studies are required to assess the relation of SE therapy and IPT more precisely. This issue will be discussed below. In the generic manual of SE therapy, transference interpretations are regarded as especially effective [1,62]. However, there is some evidence that not much emphasis is put on transference interpretations in the practice of SE therapy [27,95]. In a study of short-term SE therapy in patients with major depression, more emphasis was put on interpretations of the patient's maladaptive interpersonal patterns as experienced in current relationships outside therapy than on the interpretation of transference [95]. The majority of therapists' interventions were clarifications and questions. Furthermore, the therapists were quite active, speaking about half of the time [95]. The authors concluded from their data, that both the active stance of the therapists and the relatively infrequent use of transference interpretations is a major difference between SE therapy and classical psychoanalysis [95]. In that study, however, the early sessions 2, 3 and 4 were examined. Transference interpretations may be more frequent in later sessions when transference is more consistent. For this reason, future

studies of transference interpretation should include both later sessions as well as longer treatments. Furthermore, different psychiatric disorders should be included to see if the results possibly depend on the disorder (e.g. depressive disorder). To sum up, these results provide some evidence that SE therapy is situated more towards the supportive pole of the supportive-expressive continuum than some other models of psychodynamic psychotherapy, e.g. Malan or Strupp and Binder [13,94] and classical psychoanalysis. Future research should address the complex interactions among supportive or expressive interventions, patient's level of functioning, and outcome.

### **6.** Curative Factors: Evidence for Associations of SE Interventions With Outcome

In several studies [81,87] the impact of the interventions applied in SE therapy on treatment outcome was examined. Consistent with the assumptions of SE therapy, the accuracy of the therapist's interpretations of the patient's CCRT proved to be a significant predictor of therapeutic outcome [27,62,81,87]. This was true for the accuracy on the wish plus the response-from-other components of the CCRT, but not for accuracy on the response-from-self component [87]. These data suggest that the focus on the interpersonal components of the CCRT (wish and response from other) contributes to outcome. The correlations ranged from 0.30 to 0.46 [81,87] corresponding to medium (0.30) to large (0.50) effect sizes explaining between 9% and 25% of variance of outcome [55]. Furthermore, there is evidence that the competent delivery of expressive interventions is a significant predictor (r=-0.53) of outcome in SE therapy [37]. However, this did not apply to the competent delivery of supportive interventions [37]. Furthermore, the frequency of supportive or expressive techniques (adherence) was not related to outcome [27,37]. These findings suggest that specific techniques of SE therapy as contrasted to nonspecific factors account for a significant and substantial proportion of the variance in outcome of SE therapy [27,37]. These results also suggest that therapeutic competence should be included as an important therapist variable in psychotherapy research [37].

### **DISCUSSION**

SE therapy is a manual-guided form of psychodynamic psychotherapy that can be adapted to the treatment of specific psychiatric disorders. SE therapy differs from other forms of psychodynamic psychotherapy by its focus on the CCRT. For psychodynamically oriented therapists, such a clear formulation of the main transference pattern is very useful both in research and in everyday clinical practice. Furthermore, SE therapy allows for relatating the patient's symptoms to his or her CCRT. Depending on the patient's needs, more supportive or more expressive interventions can be applied. Thus, a broad spectrum of psychiatric disorders can be treated with SE therapy. Compared to classical psychoanalysis and other forms of psychodynamic psychotherapy, SE uses less (transference) interpretations and puts a greater focus on supportive elements. SE therapists adopt a more active stance than therapist in classical psychoanalysis [95]. Thus, SE therapy seems to be situated more towards the supportive pole of the supportive-expressive continuum than some other models of psychodynamic psychotherapy or classical psychoanalysis. Manuals for the treatment of depressive disorders, generalized anxiety disorder, bulimia nervosa, specific personality disorders or opiate and cocaine dependence are presently available. The manuals facilitate learning and training in this kind of psychodynamic therapy. According to the studies presented, reliable measures of conflict and transference (CCRT) are available. This is also true for adherence to the treatment manuals and for the competent use of the respective therapeutic techniques including the helping alliance. Empirical studies have provided evidence that SE therapy can be discriminated from other forms of psychotherapy. Further studies of SE therapy should use audio or video taping of treatment sessions in order to further investigate differences (and communalities) between different models of psychotherapy. It is an interesting question, if and how they "really" empirically differ: "Relying on brand names of therapy can be misleading" [98, p. 775]. Ablon and Jones compared the CBT and interpersonal therapies (IPT) as they were carried out in the NIMH treatment of depression study [99]. According to the results, both forms of therapy adhered most strongly to the ideal prototype of CBT. In addition, adherence to the CBT prototype yielded more positive correlations with outcome measures across both types of treatment. However, in another study, CBT and IPT could be successfully discriminated [100]. Thus, the results reported by Ablon and Jones may be specific to the NIMH treatment of depression study and may not be generalized to IPT and CBT in general. Further research on the processes of SE therapy should also address the question if changes in the CCRT are specific to SE therapy or also occur in other forms of psychotherapy, for example in CBT or IPT and if possible changes are associated with outcome. Future studies should also address the role of the helping alliance in order to clear up some of the open questions of research discussed so far.

At present, evidence for the efficacy of SE therapy is limited. Randomized controlled trials provided some evidence for the efficacy of SE therapy in specific psychiatric disorders (e.g. opiate abuse, bulimia nervosa). According to several open trials, SE therapy yielded significant improvements in depressive disorders, generalized anxiety disorder, and obsessive-compulsive and avoidant personality disorder. However, further randomized controlled trials of SE therapy in specific psychiatric disorders are required. According to the criteria suggested by the Task Force on Promotion and Dissemination of Psychological Procedures of the Division 12 (Clinical Psychology) of the American Psychological Association for the definition of empirically supported treatments [101,102]), at least two randomized controlled trials of independent research groups are required for a treatment to be recognized as efficacious in a specific psychiatric disorder. Thus, further randomized controlled trials of SE therapy are required, both for those psychiatric disorders for which one randomized controlled trial is already available, and also for psychiatric disorders for which no randomized controlled trials of SE therapy presently exist (e.g. panic disorder, post-traumatic stress disorder). At present, a large-scale multi-center study comparing SE therapy and CBT in the treatment of social phobia is being carried out in Germany. For this purpose, a manual specific to social phobia was developed [36]. This trial includes costeffectiveness analyses, studies on attachment, on neuroimaging and on genetic polymorphisms in social phobia<sup>e</sup>.

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Received: August 16, 2006 Revised: November 15, 2006 Accepted: November 16, 2006