Using the CORE-R Battery in Group Psychotherapy

Bernhard Strauss University Hospital Jena, Germany

▼

Gary M. Burlingame Brigham Young University

V

Bianca Bormann University Hospital Jena, Germany

This article applies and illustrates the American Group Psychotherapy Association (AGPA) revised CORE battery to daily practice. The CORE can assist practitioners in periodically or continuously monitoring outcome and process factors to determine patient status (e.g., improved, deteriorated, or no change), and ruptures in the therapeutic relationships. The CORE-R provides group therapists with a tool kit of measures for assessing the effectiveness of their groups and includes three classes of measures: selection, process, and outcome. We provide a summary of each class of measures along with specific instruments. © 2008 Wiley Periodicals, Inc. J Clin Psychol: In Session 64:1225–1237, 2008.

Keywords: group therapy; outcome; process; selection; measures; core battery

Clinicians sometimes hesitate to make use of research results, including specific measures, in their daily practice (Hatfield & Ogles, 2007). But when they do they often report benefiting from these methods. The following are four realistic examples from group psychotherapy:

Mary has decided to run psychotherapy groups in her practice following several months of training. She wonders if the research would provide criteria for selecting patients for her groups. In addition, she has heard that the positive effect of group

Correspondence concerning this article should be addressed to: Bernhard Strauss, Institute of Psychosocial Medicine and Psychotherapy, University Hospital Jena Stoystr. 3, D-07743 Jena, Germany; e-mail: bernhard.strauss@med.uni-jena.de

preparation has been empirically supported by the research on group therapy. She asks herself if standardized material that helps patients inform themselves about the characteristics of group treatment would be available and useful for her own purposes. Mary also wonders if there are standardized measures for assessing patient characteristics when a group is composed.

Mike is an experienced group psychotherapist and has led many outpatient groups in his professional life. He usually works with cognitive-behavioral methods and has successfully treated patients with obsessive-compulsive disorder (OCD) and anxiety disorders with manual-guided group treatment. Unfortunately, these manuals do not say much about group dynamics. Mike often asks himself if his perception of process characteristics, such as group climate or group cohesion, is congruent with the perceptions of the group members. He sometimes tries to validate his impression by asking the group members how they feel, but he has noted that the single members' perceptions are hard to interpret and to compare. Some members even have difficulties in describing their perceptions verbally without help. Mike read a lot about process research in group psychotherapy and vaguely knows about instruments that would economically monitor group-related self reports. He asks himself if he might benefit from such measures in terms of bringing his and the group members' perspectives of the group process together.

Theresa has also already run several groups and would describe herself as an experienced group leader. When she finished her last group, she felt that all group members had reached a good outcome and she was happy to end the group. To her surprise, when she met one of the members a couple of weeks later, she was informed that three of the eight patients in her group had been hospitalized soon after the group had ended. Theresa concludes that she has probably misperceived the psychological conditions of these patients. Perhaps positive feelings towards the group as a whole might have distracted her from looking closer at each member. Following this experience, Theresa thinks about introducing outcome measures in her next group to obtain standardized feedback about the clinical symptoms and status of her patients, enabling her to better react if a member reports deterioration.

Erik is working in a psychiatric hospital that is increasingly using groups for the treatment of different disorders, including depression, bipolar, and schizophrenia. He is asked by a supervisor to introduce outcome measures in order to secure objective data for quality assurance and to compare the effectiveness of the different groups. Erik asks some colleagues from his university to find measures that can be easily applied to monitor outcome on both symptomatic and interpersonal levels. He is interested in validated instruments that would allow him to compare the group outcomes from his hospital with those of other institutions and those of controlled scientific studies.

Mary, Mike, Theresa, and Erik all want to address practice questions and to improve their group outcomes. Group psychotherapy research has solutions for many of these questions and can indeed inform Mary and the others on enhancing the outcomes of their groups. All these clinicians know only too well that today's mental health climate requires accountability. Like many others, Mary and her colleagues are expected to objectively document the effectiveness of their mental health services.

Some outcome management initiatives have understandably acquired negative reputations. Clinicians are sometimes concerned that administrators may take patient outcomes and aggregate them by individual clinicians, leading to unfair comparisons and adverse decisions. These misuses of outcome data can diminish the motivation of

some practitioners to use standardized measures and to show interest in outcome research. It is increasingly critical for group therapists to find ethical, effective, and practice-friendly means to respond to the economic changes of health care.

The questions raised by Mary and her colleagues mostly belong to *practice-based evidence research*, which generally asks if a specific treatment is working for a specific patient. Practice-based evidence research, originating in studies conducted in the 1980s by Ken Howard and colleagues, assumes that practitioners should use treatments that are evidence based, but that these treatments should be coupled with patient-focused methods that consider individual differences in both patient response and therapist variability.

Thus, practice-based evidence requires measures that are sensitive to change, can be repeatedly administered, and provide information which informs the therapist about the situation of an individual patient (compared to others) and allows feedback on the patients status. The question of "What treatment works for which patient?" relates simultaneously to different levels: (a) patient characteristics that might be relevant for the selection of a particular therapy; (b) therapy process, reflecting how a patient responds to the treatment and the therapy relationship; and (c) treatment outcome that continuously reflects how a patient responds to treatment in an expected manner.

The CORE (*C*linical *O*utcome *RE*sults Standardized Measures) battery for group psychotherapy, described herein, provides a tool kit to answer questions like those raised by Mary, Mike, Theresa, and Erik. In this article, we will describe the three components of the revised CORE battery, i.e., patient selection and preparation, group process, and outcome. We further will report some of our experiences with teaching the revised CORE (CORE-R) and using it clinically.

The Revised CORE Battery (CORE-R)

In the early 1980 s, the American Group Psychotherapy Association (AGPA) sponsored the development and dissemination of a CORE battery consisting of instruments commonly used in group research. One basic idea was to assist AGPA members in evaluating the effectiveness of their group-based interventions and to augment their clinical perception. The main goal was to provide clinicians with a set of well described methods (a "self-evaluation kit") to enable themselves to evaluate their own work and to push the clinicians to a more objective, scientifically based understanding of patient improvement. Moreover, the original CORE battery was formulated to "establish the nature of particular group processes" (MacKenzie, & Dies, 1982, p.1).

The success of the original CORE was mixed. Its impact on subsequent group research is partially reflected in the number of studies that incorporated the recommended instruments. The original CORE was not fully embraced by AGPA clinical members due to a number of reasons. Many of the recommended instruments were available only through test publishers, and the cost of obtaining and using these instruments may have created a barrier. Many users expressed concerns regarding the complexity of scoring required to implement the full CORE battery. Still others opined that the timing of the CORE may have been premature, suggesting that clinicians were not "ready" to systematically track member outcomes. Finally, the CORE was never revised to include process instruments to assist clinicians in tracking important aspects of their groups, such as the climate and therapeutic factors (cf. Burlingame et al., 2006).

The idea of creating a task force to revise the CORE emerged in 2003 due to different forces. The co-chairs of the task force (Gary Burlingame, Bernhard Strauss) were working together to produce instrument recommendations for group treatment that incorporated the best of the North American and European literature. The second influence came through AGPA individuals who envisioned revitalizing the CORE as one of AGPA's initiatives to support the evidence-based group treatment. Finally, several members of AGPA's research special interest group had been active for decades developing, refining, and testing instruments to support the evidentiary base of group treatment.

Our goal was to create a revised CORE battery that would be suitable for both clinical practice as well as research endeavours. CORE-R (Burlingame et al., 2006) is divided into three sections: (a) group selection and starting a group, (b) assessing group-level processes, and (c) assessing member outcomes. The measures selected are mostly well-established and psychometrically sound. The CORE-R was completed and published in 2006 by the AGPA (Burlingame et al., 2006).

Diversity of Group Measures

In their review of small group research, Burlingame, MacKenzie, and Strauss (2004) reported that 160 different measures were used in 106 different studies! The authors concluded that too much variability and too little consensus was hurting progress of an evidence base in group therapy.

To determine whether diverse measures were still being used in group therapy research, we analysed the articles published in the two last volumes of the *International Journal of Group Psychotherapy* and the German journal *Gruppen-psychotherapie und Gruppendynamik* [Group Psychotherapy and Group Dynamics]— both journals are of the national group psychotherapy associations and address clinicians as well as researchers in North America and Germany.

In the North American Journal, a total of 11 research-oriented articles were found for the 2 years. Within these articles, four different process measures and 25 different status or outcome measures could be identified. The number of research articles was a little lower in the German journal (a total of six). Nevertheless, the articles comprise 16 different outcome/status measures and five process measures. These results underscore the ongoing tendency for researchers to develop their own measures instead of using well established ones.

The Three CORE-R Components

CORE-R is a tool kit to assist group leaders *at all stages* of their group work, beginning with member selection and preparation, the identification of important mid-treatment processes, and, finally, change metrics that could assist in tracking member improvement or deterioration (Burlingame et al., 2006). Table 1 provides an overview of the recommended material and methods for the three sections.

Group Selection and Pre-Group Preparation

It is well documented that pre-group preparation (including systematic "pre-grouptrainings") raises the effectiveness of the group treatment and reduces the risk of dropouts (Bednar & Kaul, 1994; Burlingame, Fuhriman, & Johnson, 2002). Group members prepared prior to group meetings tend to experience greater group cohesion, deviate less from tasks and goals, are more committed to attend meetings,

Section	Material/method		
Group selection and pre-group preparation	Handouts for group leaders and members		
	Presenting group therapy to clients		
	How to get the most out of group therapy		
	Information regarding group therapy		
	Group confidentiality agreement		
	Methods for group selection		
	Group Therapy Questionnaire (GTQ)		
	Group Selection Questionnaire (GSQ)		
Process measures	Primary assessment tools:		
	Working alliance inventory (WAI)		
	Other assessment tools:		
	Empathy scale (ES)		
	The group climate questionnaire-short form (GCQ-S)		
	Therapeutic factors inventory cohesiveness scale (TFI		
	Cohesion to the therapist scale (CTS)		
	Critical incidents questionnaire (CI)		
Outcome measures	Primary assessment tools:		
	Outcome questionnaire-45 (OQ-45)		
	Youth outcome questionnaire (Y-OQ)		
	Other assessment tools:		
	Inventory of interpersonal problems (IIP-32)		
	Group evaluation scale (GES)		
	Rosenberg self-esteem scale (SES)		
	Target complaints scale (TCS)		

Table 1Materials and Methods of CORE-R

have less anxiety, better understand their group roles and behaviors, and show an increased amount of faith in the group as a whole.

There are many methods for pre-group preparation: interviews, training groups, and videotapes among them. The purpose of pre-group preparation is to teach group members about the group goals, functioning of a group, organizational aspects, and potential problems. Furthermore, pre-group preparation should correct myths and misconceptions, such as group being a "second-rate" treatment, the danger of losing control within groups, etc.

The CORE-R provides several handouts that can be used by group leaders to explain the benefits of the group setting, for example: "In the group, you can go a step further than talking about the way you relate to others; you can actually *practice* changing the way you relate to others." Another handout summarizes how group members can get the most out of their group therapy, for instance, encouragement to talk about feelings and experiences, addressing other group members directly, normality of feeling anxious while talking about personal experiences with others. The set of handouts is completed by a standardized declaration, which is useful for all group members to commit themselves to be confidential about everything that is discussed in the group and to be bound to professional discretion.

The first section in the CORE-R is designed to assist group leaders in creating a well-functioning therapy group and in evaluating candidates for group membership. Table 2 summarizes evidence-based inclusion and exclusion criteria.

Currently, there are just a few standardized instruments for group selection, which reflect insufficient research in this area. The CORE-R presents two measures for

Inclusion—Suitable candidates for group therapy

- 1. The client is having difficulties in relationships with parents, friends, or partners.
- 2. The client is noticing that current relationships are affected by family of origin dynamics.
- 3. The client can discuss his or her feelings to some extent; may have some insight or previous treatment.
- 4. The client appears to have one or more healthy relationships and the basic ability to communicate without psychotic symptoms interfering.
- 5. The client may be in crisis or have some suicidal thoughts, as long as he or she seems able to connect with others and discuss these feelings and is willing to contract for safety with the leaders and group.
- 6. The client is committed to the meeting time and duration of the group.
- 7. The client has become overly dependent on an individual therapist and may benefit by the multiple transferences in group.
- 8. The client has complied with previous therapy treatments and has positive past experiences in group(s).
- 9. The client's health will not be jeopardized in any way by attending and participating in group.
- 10. The client's motivation for attending the group is not due to force or duress.

Exclusion—Clients who may not be suitable for group therapy

- 1. The client reports *many* interpersonal conflicts in his/her life appears aggressive, defensive, agitated, or hostile in his or her relationships.
- 2. The client is intensely shy or avoidant; has no friends or support system.
- 3. The client reports frequently engaging in self-defeating behaviors drug or alcohol abuse, suicidal gestures, risky sexual behaviors.
- 4. The client reports many somatic symptoms and does not report psychological reasons for his or her pain; strong denial of issues.
- 5. The client presents in a vague manner; does not treat difficulties seriously.
- 6. The client reports feeling sure that he or she will not feel comfortable in group or be able to discuss problems openly; strongly questions whether group therapy will be helpful.
- 7. The client suffers from a sufficiently high level of paranoia that might impede the individual at group work.
- 8. The client may be prone to deviate from the tasks of the group thereby disturbing other group members.
- 9. The client demonstrates a severe incompatibility with one or more group members.
- 10. The client will affect the group's safety in someway.

potential use in selecting group members: the *Group Therapy Questionnaire* (GTQ) and the *Group Selection Questionnaire* (GSQ).

The GTQ is a self-report instrument designed to assess preexisting client variables affecting potential group behavior (MacNair-Semands & Corazzini, 1998; MacNair-Semands, 2002). The instrument is rather complex (administration: 35–45 minutes; scoring: 10–15 minutes) and includes 44 items covering 10 content areas in addition to a 34-item interpersonal checklist. The GTQ measures the following variables: previous therapy experiences, expectations towards the group, family roles, symptoms of substance use and abuse, somatic symptoms, suicidal thoughts and crises, goals for group treatment, barriers and fears related to a successful group treatment.

The GSQ (Cox, Burlingame, Davies, Gleave, & Barlow, 2004) is more timeeconomic and also available in German (Löffler, Bormann, Burlingame, & Strauss, 2007). The GSQ is a self-report instrument which assesses the likelihood that clients will contribute to and benefit from group therapy. The GSQ comprises 19 items (administration: 3–5 minutes; scoring: 5 minutes) and is intended to be used as a screening instrument to highlight clients who may not contribute to beneficial group processes or are at risk for poor outcomes. The factor structure (expectancy, ability to participate, social skills) derived from a Bosnian sample was tested and confirmed in a U.S. and a German sample. So far, the GSQ has been found to be predictive; its discriminate validity has been demonstrated in a qualitative study of clinical and non-clinical respondents.

Group Process

The therapy *process* is usually defined as what occurs during the group therapy session, independent of the content. Thus, process includes dimensions that are observable (e.g., specific member behaviors or the quality of interpersonal interactions) as well as those dimensions that must be inferred (e.g., the individual member's experience of therapist empathy or the level of group cohesion). Measures of these dimensions can be derived from different sources: the individual patient, the group therapist(s), or external observers. Ratings using these measures can focus specifically on the individual's experience (e.g., the group member's report of therapist empathy) or on phenomena associated with the general functioning of the group (e.g., members' ratings of group cohesion).

For the CORE-R, only patient self-report measures of the group process were considered. This choice reflects the critical nature of the patients' perspective in clinical outcome and the ease of use associated with patient self-reports. Moreover, the CORE-R Task Force used the following criteria in selecting measures: (a) well-established, (b) psychometrically sound, (c) represent basic aspects of the psychotherapeutic group process, (d) reflect process variables on an individual and a group level at the same time, and (e) relatively short and economic in use.

The question of what measures should be chosen for CORE-R was answered in relation to a conceptual model advanced by Johnson, Burlingame, Olsen, Davies, and Gleave (2005; see also Bormann & Strauss, 2007). Based upon research results, the authors found three basic components of the group therapy experience: a positive relational bond, a positive working alliance, and negative therapeutic factors. Each component could be addressed in terms of two perspectives: the member's relationship to the therapist and the member's relationship to the group-as-a-whole. Moreover, the individual member's relationship to the group therapist, the other members, and the group as a whole all appeared to contribute to that person's perception of the therapeutic environment. The Johnson et al. model originally differentiated six component-perspective combinations indicating how each measure could be used. Table 3 presents the single process measures of CORE-R and relates these to six components of the model of Johnson et al.

For CORE-R, several process measures are recommended to assess these different components.

The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) is one of the most frequently used scales for assessing the therapeutic relationship and was recommended as the *primary process measure* that should be selected if more than one cannot be applied. The WAI is a 36-item self-report instrument that assesses the quality of the working alliance between a patient and a therapist. Patient reports of a strong alliance, particularly early in the course of therapy, have been shown to be good predictors of therapy process and outcome. The WAI is based on Bordin's (1976) concept of the working alliance and addresses three constituent components (bonds, tasks, goals). It takes 5 to 10 minutes to administer and another 5 to 10 minutes to score.

The *Empathy Scale* (ES; Persons & Burns, 1985) is a short self-report instrument comprising 10 items. It asks patients to rate how warm, caring, and empathic their

Measure	Bond relationship		Working relationship		Negative relationship	
	Therapist	Group	Therapist	Group	Therapist	Group
Working alliance inventory						
Bond						
Tasks	•					
Goals			, V			
Empathy scale			· ·			
Positive						
Negative	•					
Group climate questionnaire					•	
Engagement						
Conflict		•				
Avoidence				•		
Therapeutic factors inventory						•
Cohesion						
Cohesion to the therapist scale		•				
Positive qualities						
Personal compatibility	· ·					
Dissatisfaction			•			

Table 3

Group Process Measures and Process Component-Perspective Combinations

therapist(s) were during the most recent therapy sessions. Patients record how strongly they agree with each scale item, with response options ranging on a 4-point Likert scale from "*not at all*" to "*a lot*." Five of the items are written so that a strong agreement indicates a good therapeutic relationship, and the other five items are worded so that strong agreement indicates a poor therapeutic relationship.

The Group Climate Questionnaire (GCQ-S; MacKenzie, 1983; Tschuschke, 2002) is probably (worldwide) the most common instrument to measure group processes. The GCQ is a self-report instrument that assesses a members' perception of the climate within the group and reflects three dimensions of group climate: *engagement*, *avoidance*, *and conflict*. The engagement scale assesses the sense of closeness, group members' attempts to understand the meaning of behaviour, the importance of the group for its members, a willingness to challenge one another, as well as selfdisclosure. The avoidance scale reflects the degree of reluctance among the group members to assume responsibility for psychological change. Finally, the conflict scale reflects the presence of interpersonal friction. It involves anger within the group, distance between the members, distrust, and tension among the members. The GCQ-S consists of 12 items; it takes less than 5 minutes to complete and about the same time to score.

The Cohesiveness subscale of the Therapeutic Factors Inventory (TFI; Lese & MacNair-Semands, 2000) is recommended to measure group cohesion. Group cohesion is regarded as a necessary condition of change in group therapy. In other words, cohesion represents an investment in and commitment to the group by the members. Again, the group members' experience of significant therapeutic work during sessions further increases group cohesion. The cohesiveness subscale of the TFI has nine items, is quick to complete and score, and reflects the member's sense of belonging and experience of acceptance, trust, and cooperation in the group.

The CORE manual also recommends the use of the *Cohesion to Therapist Scale* (CTS; Piper, Marrache, Lacroix, Richardsen, & Jones, 1983). The 9-item CTS is

a self-report measure of cohesion to the therapist perceived by a group member (positive qualities, dissatisfaction with the leader's role, personal compatibility). The CTS is one component of a more comprehensive self-report measure of cohesion that assesses three basic bonds in the group: members to therapist, member to other members, and member to the group-as-a-whole.

Finally, the *Critical Incidents Questionnaire* (CI) is recommended (e.g., MacKenzie, 1987). The CI involves open-ended questions and narrative responses. Group members may need up to 20 minutes to complete the CI. This instrument was developed to tap into group members' experience of the therapeutic factors and to allow a more *qualitative perspective* on group experiences.

Treatment Outcome

The third CORE-R section relates to the need of group therapists to integrate treatment outcome evaluation into their routine clinical practice. Treatment outcome measures extend therapist's impressions, supplement clinical judgment regarding patient progress, and detect problematic patient progresses at an early stage (Asay, Lambert, Gregersen, & Goates, 2002). Comprehensive outcome evaluation can rarely be done in routine clinical practice; therefore, the CORE-R Task Force chose outcome instruments that can be used economically. The following selection criteria for measures were employed: (a) brief, (b) comprehensive, (c) easy to administer, (d) free of any theoretical bias, (e) sensitive to change, (f) established reliability and validity, and (g) widely used (Burlingame et al., 2006).

The Outcome Questionnaire 45 (OQ-45; Lambert, Hannöver, Nisslmüller, Richard, & Kordy, 1996) was chosen as the central symptom measure. This tool has proven its value in many studies (cf. Lambert et al., 2002) and is available in different languages (cf. http://www.oqmeasures.com). The OQ-45 is a self-report instrument designed for repeated measurement of adult patient progress through the course of psychotherapy. The questionnaire has 45 items with three key aspects: subjective discomfort, interpersonal relationships, and social role performance. The overall score of the OQ provides a global assessment of patient functioning. The Symptom Distress subscale assesses anxiety, depression, and substance abuse. The second subscale Interpersonal Relations is about friendship, family life, and marriage. The items of the third subscale Social Role Performance assess patient's level of dissatisfaction, conflict, or distress in his or her employment, family roles, and leisure life. In the U.S., the OQ-45 seems to be popular and, since there is an electronic version, at least in English, the OQ-45 was favored over the SCL 90-R. As expected, the OQ-45 and the SCL 90-R overall scores are highly correlated. The benefit of the OQ is the existence of a version for adolescents (YOO-45).

In addition to the OQ-45 as a symptom measure, the CORE-R Task Force recommended the following outcome instruments to further distinguish group treatment effects (Burlingame et al., 2006: CORE-R manual):

The short version of the *Inventory of Interpersonal Problems* (IIP; Horowitz, 1999) measures interpersonal distress in 32 items and takes 10 to 15 minutes to complete and another 10 to 15 minutes to score. The IIP is a self-report instrument designed to assess problems in interpersonal interactions that are reflected by difficulties in either executing particular behaviors or exercising restraints. The instrument is based upon interpersonal theories of behavior that have a long tradition in personality and social psychology (e.g., Sullivan, 1953; Leary, 1957; Kiesler, 1996).

The *Rosenberg Self-Esteem-Scale* (SES; Rosenberg, 1965) is another self-report measure and assesses the patient's self-esteem or rather self-acceptance with 10 items (administration: 5 minutes; scoring: 5 minutes or less).

With the help of the *Group Evaluation Scale* (GES; Hess, 1996), patient's experiences with group therapy and their treatment outcome can be assessed. The GES is a global measure for the retrospective assessment of the group and its role in psychotherapeutic change. The measure comprises seven items (administration: 2–3 minutes; scoring: 1 minute) and measures a patient's general feelings towards the group, feelings of stability/instability, the ability to explain problems in front of the group, the helpfulness of other group members, and the feelings of being understood, autonomous, and responsible. This measure was part of a battery used for group research in the GDR and has been mainly applied in several studies on inpatient group psychotherapy in Germany (e.g., Strauss & Burgmeier-Lohse, 1994).

Finally, the *Target Complaints* measure (Battle et al., 1966) was included to add an individualized instrument of outcome. The target complaints scale is a common measure of psychotherapy outcome based on a patient's description of the specific problems for which they have sought treatment. Patients are asked to name a maximum of three goals for therapy and then to rate each goal on a 5- or an 11-point scale according to the severity of distress and expectation for improvement (administration: 15–20 minutes; scoring: 5 minutes).

The use of these four measures, along with the OQ-45, will provide a thorough assessment of patients' performances and experiences in group psychotherapy without unreasonable intrusion on therapists' or patients' time.

Teaching Use of the CORE-R

After CORE-R was published as a manual (Burlingame et al., 2006), the members of the task force started to disseminate it among group psychotherapists. The manual itself contains a series of slides to explain and demonstrate the single components of CORE-R and that will allow further distribution.

Members of the task force (Strauss, Burlingame, Joyce, & MacNair-Semands) have provided courses based on the CORE-R at multiple professional meetings. These courses introduce the notion of practice-based evidence at the conceptual level and then present the CORE-R as a concrete example of how practice-based evidence can be applied to group treatments. Over the 6-hour course, participants are taught about selection, process, and outcome measures using didactic and experiential methods. Formal course assessments suggest a largely positive response (90+% ratings), but informal follow up suggests that a minority (25–33%) of participants go on to implement one or more of the measures in their clinical practice.

At the time of this writing, a pilot study consisting of two university counselling centers are testing a computerized delivery system of the CORE-R. The goal of this is to make administration, scoring, and interpretation of the instruments as time-efficient as possible for group practices. Preliminary findings from two of the four sites suggest little resistance on the part of group members and a generally positive response from clinicians.

Clinical Use of the CORE-R

The increasing emphasis on therapist accountability and evidence-based practice points to the need for clinicians to integrate outcome evaluation into routine clinical practice. Integrating outcome and process evaluation into regular practice might have some compelling benefits (Asay et al., 2002). Having information from the assessment may facilitate discussion between the patient and therapist regarding factors related to a patient's lack of progress and possible changes that could be made in the treatment approach to improve therapy. In addition, use of outcome measures allows the therapist to compare the progress and outcome of patients in his or her own practice with that of former patients or patients from other, even national, samples. Use of outcome measures would also allow the therapist to develop a database of his or her own patients. This may provide a more meaningful perspective for assessing patient progress rather than relying solely on data from national samples.

Mary, Mike, Theresa, Frank, Erik, and other group therapists will likely be satisfied with the CORE-R tool kit. Mary will find a variety of helpful handouts to prepare her group members in the CORE manual. She will find a variety of empirically based recommendations for composing her groups, and she will be able to use standardized instruments to screen her patients for suitability. Mike will be able to take some snapshots of the therapy process and aspects of the therapeutic relationship in his group and economically get a comparative picture of the group members' perceptions of the group. Theresa will be much more on the safe side if she continuously monitors the clinical status of her patients. Outcome measures such as the OQ-45 give valid indicators of the treatment progress and early indicators of treatment failure. Finally, Erik has found a variety of measures to do some large-scale evaluations that will build up a database in his hospital and, in the future, will help him to assure the quality of group work in his psychiatric unit.

CORE-R gives group therapists the means to conduct both process and outcome evaluations in regular practice and to apply standardized methods for the selection of their group patients. The CORE-R Task Force understood the challenge of monitoring individual patient change when one is leading a group composed of six, eight, ten, or more members. We also know from the empirical and clinical literature that members often drop out of group treatment when they are dissatisfied with their personal progress. The periodic assessment of individual patient outcomes in a group offers a group leader another source of information regarding patients who may evidence no change or deterioration. Such insight may enable a leader to act *before* the member drops out of treatment.

The CORE-R also recommends the assessment of group-level processes that have been shown to be predictive of successful group and individual outcomes. These group-level processes include the climate of the group and the ubiquitous therapeutic factor of cohesion. We envision the evidence-based group leader periodically taking the "pulse" of the group, being curious about group processes, and being open to the possibility that measures of such may reveal "surprises" about differences in individual member experiences of the group-as-a-whole.

References

- Asay, T.P., Lambert, M.J., Gregersen, A.T., & Goates, M.K. (2002). Using patient-focused research in evaluating treatment outcome in private practice. Journal of Clinical Psychology, 58, 1213–1225.
- Battle, C.C., Imber, S.E., Hoehn-Saric, R., Stone, A.R., Nash, E.R., & Frank, J.D. (1966). Target complaints as criteria of improvement. American Journal of Psychotherapy, 20, 184–192.

- Bednar, R.L., & Kaul, T.J. (1994). Experiential group research: Can the cannon fire? In A.E. Bergin & S.L. Garfield, (Eds.), Handbook of psychotherapy and behavior change (4th ed., pp. 631–663). New York: Wiley & Sons.
- Bordin, E.S. (1976). The generalizability of the psychoanalytic concept of the working alliance. Psychotherapy, 16, 252–260.
- Bormann, B., & Strauss, B. (2007). Gruppenklima, Kohäsion, Allianz und Empathie als Komponenten der therapeutischen Beziehung in Gruppenpsychotherapien - Überprüfung eines Mehrebenen-Modells [Group climate, cohesion, alliance, and empathy as components of the therapeutic relationship within group psychotherapy – Test of a multilevel model]. Gruppenpsychotherapie und Gruppendynamik, 43, 1–20.
- Burlingame, G.M., MacKenzie, K.R., & Strauss, B. (2004). Small group treatment: Evidence for effectiveness and mechanisms of change. In M.J. Lambert, (Ed.), Begin and Garfield's handbook of psychotherapy and behavior change (4th ed., pp. 647–696). New York: Wiley.
- Burlingame, G.M., Strauss, B., Joyce, A., MacNair-Semands, R., MacKenzie, K.R., Ogrodniczuk, J., et al. (2006). CORE battery – revised: An assessment tool kit for promoting optimal group selection, process and outcome. New York: AGPA.
- Burlingame, G.M., Fuhriman, A., & Johnson, J. (2002). Cohesion in group psychotherapy. In J.C. Norcross, (Ed.), A guide to psychotherapy relationships that work (pp. 71–88). Oxford University Press.
- Cox, J., Burlingame, G.N., Davies, R., Gleave, R., & Barlow, S. (2004). The group selection questionnaire: Further refinements in group member selection. Paper presented at the annual meeting of the American Group Psychology association, New York.
- Hatfield, D.R., & Ogles, B.M. (2007). Why some clinicians use outcome measures and others do not. Administration and policy in mental health and mental health services research, 34, 283–291.
- Hess, H. (1996). Zwei Verfahren zur Einschätzung der Wirksamkeit von Gruppenpsychotherapie. [Two methods to assess the effectiveness of group psychotherapy.] In B. Strauss, J. Eckert, & V. Tschuschke, (Eds.), Methoden der empirischen Gruppentherapieforschung Ein Handbuch (pp. 142–158). [Methods of empirical group psychotherapy research A user guide.] Opladen: Westdeutscher Verlag.
- Horowitz, L.M. (1999). Manual for the inventory of interpersonal problems. San Antonio: The Psychological Corporation.
- Horvath, A.O., & Greenberg, L.S. (1989). Development and validation of the working alliance inventory. Journal of Counseling Psychology, 36, 223–233.
- Johnson, J.E., Burlingame, G.M., Olsen, J., Davies, D.R., & Gleave, R. (2005). Group climate, cohesion, alliance, and empathy in group psychotherapy: Multilevel structural equation models. Journal of Counseling Psychology, 52, 310–321.
- Kiesler, D.J. (1996). Contemporary interpersonal theory and research. New York: John Wiley & Sons.
- Lambert, M.J., Hannöver, W., Nisslmüller, K., Richard, M., & Kordy, H. (2002). Fragebogen zum Ergebnis von Psychotherapie. Zur Reliabilität und Validität der deutschen Übersetzung des Outcome Questionnaire 45.2 (OQ-45.2) [Questionnaire on the results of psychotherapy: Reliability and validity of the German translation of the Outcome Questionnaire 45.2 (OQ-45.2)]. Zeitschrift für Klinische Psychologie und Psychotherapie, 31, 40–47.
- Lambert, M.J., Hansen, N.B., Umphress, V., Lunnen, K., Okiishi, J., Burlingame, et al. (1996). Administration and scoring manual for the Outcome Questionnaire (OQ-45.2). Wilmington, DL: American Professional Credentialing Services.

Leary, T. (1957). Interpersonal diagnosis of personality. New York: Ronald Press.

Lese, K.P., & MacNair-Semands, R.R. (2000). The therapeutic factors inventory: Development of a scale. Group, 24, 303–317.

- Löffler, J., Bormann, B., Burlingame, G.B., & Strauss, B. (2007). Deutsche Version des Group Selection Questionnaire [Patient Selection for Group Psychotherapy - A Validation Study of the Group Selection Questionnaire (GSQ) in German Clinical Sample]. Zeitschrift für Psychiatrie, Psychologie und Psychotherapie, 55, 75–86.
- MacKenzie, K.R. (1983). The clinical application of a group climate measure. In R.R. Dies, & K.R. MacKenzie, (Eds.), Advances in group psychotherapy: Integrating research and practise (pp. 159–170). New York: International Universities Press.
- MacKenzie, K.R. (1987). Therapeutic factors in group psychotherapy. Group, 11, 26-34.
- MacKenzie, K.R., & Dies, R. (1982). AGPA CORE-Battery. New York: AGPA.
- MacNair-Semands, R.R. (2002). Predicting attendance and expectations for group therapy. Group Dynamics: Theory, Research and Practice, 6, 219–228.
- MacNair-Semands, R.R., & Corazzini, J. (1998). Manual for the group therapy questionnaire (GTQ). Copyright with Counseling Services at Virginia Commonwealth University and UNC at Charlotte Counseling Center.
- Person, J.B., & Burns, D.D. (1985). Mechanisms of action of cognitive therapy: Relative contribution of technical and interpersonal intervention. Cognitive Therapy and Research, 9, 539–551.
- Piper, W.E., Marrache, M., Lacroix, R., Richardsen, A.M., & Jones, B.D. (1983). Cohesion as a basic bond in groups. Human Relations, 36, 93–108.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Strauss, B., & Burgmeier-Lohse, M. (1994). Stationäre Langzeitgruppentherapie. [Inpatient long-term group psychotherapy.] Heidelberg: Asanger.
- Sullivan, H.S. (1953). The interpersonal theory of psychiatry. New York: Norton.
- Tschuschke, V. (2002). Der Gruppenklima-Fragebogen (GCQ-S). [The group climate questionnaire.] In E. Brähler, J. Schumacher, & B. Strauss, (Eds.), Diagnostische Verfahren in der Psychotherapie (pp. 163–166). [Diagnostic Methods in Psychotherapy.] Göttingen: Hogrefe.

Copyright of Journal of Clinical Psychology is the property of John Wiley & Sons Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.