Personal Therapy: A Disorder-Relevant Psychotherapy for Schizophrenia

by Gerard E. Hogarty, Sander J. Kornblith, Deborah Greenwald, Ann Louise DiBarry, Susan Cooley, Samuel Flesher, Douglas Reiss, Mary Carter, and Richard Ulrich

Abstract

While the long-term care of ambulatory schizophrenia patients requires highly effective interpersonal treatment skills among clinicians, there is little evidence to support an empirically validated individual psychotherapy of schizophrenia. Personal therapy (PT) attempts to address the apparent limitations of traditional psychotherapy by modifying the "model of the person" to accommodate an underlying pathophysiology, minimizing potential iatrogenic effects of maintenance antipsychotic medication, controlling sources of environmental provocation, and extending therapy to a time when crisis management has lessened and stabilization is better ensured. By means of graduated, internal coping strategies, PT attempts to provide a growing awareness of personal vulnerability, including the "internal cues" of affect dysregulation. The goals are to increase foresight through the accurate appraisal of emotional states, their appropriate expression, and assessment of the reciprocal response of others. The strategies are supplemented by phase-specific psychoeducation and behavior therapy techniques. Practical issues in the application of this new intervention are discussed. Preliminary observations from two samples of patients, one living with and the other living independent of family, suggest differential improvement over time among PT recipients.


The treatment of schizophrenia frequently resolves as a "one-on-one" therapeutic encounter between clinician and patient. This is especially true in communities worldwide where comprehensive care programs are absent or inadequate. While patients with schizophrenia might often be managed in groups, little evidence supports the differential therapeutic advantage of this approach (Schooler and Hogarty 1987).

With the exception of isolated trials of social skills and cognitive training (Bellack and Mueser 1993), the research literature also provides little or no support for an individual psychotherapeutic experience that is demonstrably effective for the schizophrenia outpatient. Traditional, insight-oriented therapies have been tried and most often found wanting in the better controlled empirical studies. The alleged failure of traditional psychotherapeutic approaches has been frequently analyzed and reported elsewhere (Gunderson and Mosher 1975; May 1975; Van Putten and May 1976; Schooler 1978; Klein 1980; Klerman 1984; Drake and Sederer 1986; Schooler and Hogarty 1987; Katz and Gunderson 1990). An array of supportive strategies, the ubiquitous but poorly validated case management approach, and generic "expressive art" activities appear to us to be the more common patient-centered therapeutic interventions routinely used by clinicians today. Major advances in the development and testing of novel psychosocial treatments of schizophrenia over the past decade have emphasized fam-
ily psychoeducation and management strategies (Angermeyer 1987), even though a substantial number of schizophrenia patients live independent of or isolated from significant others (Tessler et al. 1982). Otherwise, these contemporary family intervention studies have often been limited to patients living in high expressed emotion (EE) households and, by definition, have primarily included unmarried young men with schizophrenia living in parental households, which limits generalization (Hogarty 1985).

Conditions for the Test of an Effective Psychotherapy

In designing personal therapy (PT), we felt that the inconsistent effects of traditional psychotherapy among schizophrenia patients could probably be traced in part to important factors that were not explicitly accommodated. These include the control of medication dose, assurance of residential stability and access to entitlements, length of treatment exposure, a study design that would unconfound the prophylactic effects against relapse and those related to improved adjustment, and recruitment of more representative samples.

Of primary importance is the frequent necessity to maintain schizophrenia patients concurrently with antipsychotic medication, which itself might represent a potential interference with psychotherapy. While there is no evidence that chemotherapy negates the effects of psychosocial treatment and while chemotherapy is actually more likely to be the prerequisite for positive psychotherapeutic effects (Grinspoon et al. 1972; Schooler 1978; Schooler and Hogarty 1987), patients can scarcely attend to subjective and interpersonal issues when maintenance antipsychotic medication is making them uncomfortable. The integration of psychotherapy and psychopharmacology demands exquisite sensitivity to the potential iatrogenic effects of antipsychotic medication (Hogarty, in press). Dopaminergic systems, for example, remain central to what might be viewed as the executive functions of the ego, including motivation, planning, and problem solving, as well as to the initiation and maintenance of action (Stellar and Stellar 1985). Dopamine antagonism, however, while believed to be essential to the resolution and continued remission of positive symptoms, can herald unwanted behavioral toxicity (Van Putten and Marder 1987) if typical antipsychotics are used at unnecessarily high doses. Constraints against willed behavior, initiative, and motivation; induction of internal restlessness; and precipitation of slow and effortful cognitive processing are additional unwanted sequelae (Frith 1987) often observed among the more subtle forms of extrapyramidal side effects. Further, at higher than necessary doses of neuroleptic, the subsequent need for antiparkinson medication often leaves many patients susceptible to adverse anticholinergic effects on the verbal learning of new information (McEvoy and Freter 1989).

Since most existing studies of formal psychotherapy were undertaken in the era of typical neuroleptics, there has been little supportive evidence that the therapy was applied in the context of minimum effective dosing strategies. Such strategies would include the neuroleptic threshold approach (e.g., approximately 4 ± 2 mg haloperidol a day), which is appropriate to acute, inpatient treatment (McEvoy et al. 1991), and the low-dose maintenance approach (e.g., approximately 5–12.5 mg fluphenazine decanoate injection once every 2 wks), which attempts to maintain outpatients at dose levels that elicit only minimal hypokinetic rigidity; this latter is an optimal dose below which prodromes of psychosis would likely appear (Hogarty et al. 1988). Should patients decompensate while receiving depot neuroleptic medication, noncompliance could be ruled out and the therapist might profitably turn to elements of the psychosocial treatment plan itself and/or to independent stressors as possible contributing factors.

Otherwise, traditional psychotherapy is, by definition, patient centered. It is reasonable to assume that research psychotherapists probably did address patient conflicts and concerns about their social and physical environments. However, little independent evidence exists to indicate that explicit and programmed attempts at environmental manipulation—particularly efforts directed toward sources of provocation that conspired against a safe, predictable, and stimuli-controlled environment for the patient—were made during outpatient studies (Anderson et al. 1980). At the least, the optimum psychotherapeutic management of schizophrenia patients also would have needed to accommodate the informational needs of families and significant others about the illness, as well as to provide for stable and safe housing, offer protection from sources of exploitation and victimization, and secure needed financial entitlement benefits.

In the ideal study of psycho-
therapy, if patients experienced an interim relapse and rehospitalization, they would be returned to protocol following discharge, most often at a therapeutic stage below that previously attained. At any given cross-sectional point in time, approximate numbers of relapsed (relatively few) and nonrelapsed patients would be available for each treatment condition, thus providing an opportunity to test each treatment effect on adjustment independently.

With the possible exception of the new Treatment Strategies in Schizophrenia Collaborative Study (personal communication, N. Schooler, October 1993), however, none of the contemporary, well-controlled, long-term maintenance studies of psychosocial treatment has systematically reentered patients into protocol following a psychotic relapse. Thus, in the presence of differential relapse rates by treatment condition, endpoint analyses that attempt to assess personal and social adjustment become redundant statements of the earlier observed prophylactic effect on relapse (Hogarty et al. 1991). Adjustment analyses of nonrelapsed survivors have revealed circumscribed effects on personal and social adjustment, but these effects could not be easily generalized to the more representative samples of patients that originally entered protocol (Hogarty et al. 1974, 1991).

For our research, we felt that an appropriate test of psychotherapy needed to include an independent sample of schizophrenia patients who lived alone or at least lived independent of their family. Among those residing with family, we also wished to explore the effects of treatment among patients who resided in high or low EE households (Kavanagh 1992) and to increase the representativeness of samples accordingly by enlisting more racial minority patients as well as women.

Finally, no published controlled study of an individual psychosocial therapy for schizophrenia has extended beyond 2 years. We perceived the need to achieve a stable clinical state and relative remission of positive psychotic symptoms before applying advanced psychotherapeutic principles. But such a therapeutic process would require years of exposure rather than weeks or months. A 3-year controlled trial might thus provide the long-awaited opportunity to evaluate the timing of psychotherapeutic initiatives relative to the patient's clinical state; the feasibility, acceptance, and efficacy of specific therapeutic techniques within treatment stages; and the broad limitations of treatment defined by the number and types of patients able to master each phase of therapy successfully (Lowery 1988).

Rationale for PT

Our new therapy addresses three issues: disorder-relevant practice principles, the gradual staging of interventions, and the centrality of affect dysregulation.

First, there has been an apparent neglect of schizophrenia as a discrete group of disorders whose psychosocial-biological components would properly define, if not dictate, the principles of clinical practice. The reality is, however, that functionally, schizophrenia is a disorder of basic and social cognition (e.g., Dawson and Nuechterlein 1984; Nuechterlein and Dawson 1984; Hogarty and Flesher 1992), wherein attention and arousal impairments and the associated problems in information processing, working memory, motivation, and social judgment might conspire against the theoretical premises of traditional, insight-oriented psychotherapy. As Carr and Burnett (1983) have argued, the domains of formal psychotherapy (including techniques, targeted problems, and goals) lie beyond the conceptual formulation of a "disease model" and have relevance largely in the "model of the person," wherein the meaning of subjective experience holds prominence. (These authors conclude that psychotherapy "outcomes" in schizophrenia studies have inappropriately reflected the disease model.) Few clinicians today, however, would discount findings from the neurosciences, principally the cytoarchitectonic studies (e.g., Arnold et al. 1991; Benes et al. 1991; Stevens 1992; Akbarian et al. 1993a, 1993b). These findings increasingly indicate that for many patients, schizophrenia resembles a developmental cerebral hypoplasia (Weinberger 1986), with a prominent manifestation of neuropsychological vulnerability apparent in adolescence or early adult life (Feinberg 1982), a developmental insult of varying severity that would accommodate the heterogeneity in onset, symptom formation, treatment response, course, and outcome. As such, schizophrenia could potentially be treated within a disease model if necessary modifications to the psychotherapeutic process were made. An a priori assumption of traditional psychotherapy has been that cerebral integrity exists and that therapy need only facilitate the patient's application of positive adaptive skills and/or the modification of maladaptive tendencies through the identification and in-
terpretation of unconscious or pre-
conscious drives and motives—that
is, the development of insight. But
such attempts at insight enhance-
ment among cognitively disordered
patients might themselves be suffi-
ciently provocative to precipitate
an exacerbation of psychosis, as
argued in the reviews cited above.
Traditional psychotherapy also
proceeds on the assumption that
faulty psychological defenses might
lie at the root of patient difficul-
ties, whereas in the disease model,
the dysfunctional behavior of
schizophrenia could be viewed as
an indicator of underlying neurobi-
ological deficits. Thus, we sought
to develop a disorder-relevant psy-
chotherapy, one that would modify
the “person-centered” model so as
to accommodate neuropsychological
aspects of the underlying diathesis.
Second, we reasoned that PT,
like our earlier tested and effective
family approach (Hogarty et al.
1986), needed to be staged, with
the introduction of increasingly so-
plicated techniques timed ac-
tording to patient level of recov-
ery. A careful reevaluation of our
own and others’ prior attempts at
individual psychosocial approaches
to the maintenance of schizophrenia
patients led to the following obser-
vations. We found that major
role therapy’s unstaged and ag-
gressive attempts at social restaura-
during the first 6 months of
recovery from an episode some-
times provoked relapse (Hogarty
et al. 1973, 1974; Goldberg et al.
1977). These results were similar to
other intensive attempts at rehabili-
tation that precipitated relapse
among vulnerable outpatients in
the first 6 months (Lamb and
Goertzel 1972) or that provoked
long-dormant positive symptoms
among chronic inpatients (Wing
and Brown 1970). Later studies
provided more evidence about the
adverse effects of poorly timed inter-
ventions among both newly dis-
charged patients assigned to high-
expectation foster homes (Linn et
al. 1980) and schizophrenia pa-
tients treated early in the course
of recovery in more dynamic day
treatment centers (Linn et al.
1979). More recently, recipients
of our family psychoeducation and
social skills training approaches
appeared to succumb to a new
episode of psychosis once they left
the protection of the “therapeutic
umbrella”; these patients, by inher-
ence, were unprepared for extrafa-
milial social and vocational en-
counters (Hogarty et al. 1991).
Their referrals to a collaborating
vocational rehabilitation center at
times appeared premature, given
that minor and major psychotic
exacerbations often required them
to be removed from this setting
(Hogarty et al. 1991). In refining
the principles of PT during 1987,
we were further influenced by the
contributions of Breier and Strauss
(1983), Carr (1983), Böker et al.
(1984), and Brenner et al. (1987),
whose concepts have continued to
evolve in recent years (see, e.g.,
Strauss 1989; Dittman and Schutt-
ler 1990; Takai et al. 1990) and
whose observations address the
discrete phases and associated
processes characterizing recovery
from schizophrenia, which psycho-
therapy should attempt to accom-
modate.
More important, an analysis of
the literature related to psychotic
decompensation and recovery doc-
ments the importance of affect.
Whether one conceptualizes recovery
from psychosis or decompen-
sation in the “stage” or the
“continuum” models, affective
dysregulation has been consistently
identified either as a causal or as-
associated precursor of a new schiz-
ophrenic episode, or as a residual
of psychosis that compromises per-
sonal and social adjustment (Carr
1983). In point of fact, when it has
been possible to characterize schiz-
ophrenic prodromal states, such as-
sessments invariably include as
much change in affect as in cogni-
tive dysfunction as the potential
herald of a new episode (Herz
1985; Herz et al. 1989). After re-
viewing the central contribution of
impaired affect to the nature of
schizophrenia, as well as its role
in the exacerbation of psychosis
and persistent social dysfunctional-
ing among recovering outpatient
(Hogarty et al. 1995), we con-
cluded that psychotherapeutic
strategies designed to control the
“limbic-dominant” behavior of
schizophrenia patients (Taylor and
Cadet 1989) seem essential to any
new psychotherapeutic initiative.
We now offer our first descrip-
tion of a PT approach that at-
ttempts to better accommodate
these realities of schizophrenia
while addressing the limitations
of prior psychotherapeutic
approaches.

Description of PT

Our family psychoeducation/
management approach sought to
address the destabilization of at-
tention and arousal by gaining di-
rect control over external sources
of family stress, and our social
skills training used indirect control
to address patient behaviors that
were believed to elicit negative
family feedback (Hogarty et al.
1986). PT, on the other hand, was
conceptualized as a response to the
internal sources of affective
dysregulation, defined as the loss
of control or regulation of mood.
At the individual case level, we
characterize and assess affective dysregulation as the individual patient’s typical mode or “pattern” of affective response to any one of a number of external threats. PT was thus designed to equip patients with adaptive strategies that would facilitate the self-control of affect, a state that we believe follows the individual perception of stress, which is a unique, subjective experience that is at least quasi-independent of a specific situation or event. Past experience had impressed on us the commonalities in an individual patient’s response to diverse stressors rather than the variability of affective response according to discrete events. In conceiving PT, we did not presume to “treat” or otherwise extinguish affect; rather, we sought to control the process wherein escalating affect might lead to spontaneous, familiar, but poorly reasoned dysfunctional behavior, including psychotic symptoms. PT became an exercise in managing personal vulnerability through a process of guided recovery.

In practice, PT seeks to develop both an awareness and an understanding of the patient’s subjective state, including intense and troublesome affects, the alternatives available for the control or expression of these feelings, and the influence of these feelings on the reciprocal behavior of others. PT attempts to enhance the patient’s sensitivity to the stages and processes of recovery and, in the course of treatment, provide coping strategies appropriate to the patient’s clinical state that might serve to lessen personal vulnerability to stress. To our knowledge, the emphasis on affect-specific responses, independent of the stressor, distinguishes PT from existing forms of psychosocial therapy. Whether such an approach will lead to differential gains when contrasted to a non-specific supportive therapy or a strategic family intervention is a central hypothesis that we are now testing.

The acquisition of awareness and foresight during PT also relies on the traditional behavioral techniques of modeling, rehearsal, practice, feedback, and homework assignments. Accordingly, PT does not subscribe to the deterministic beliefs that have tended to segregate ego psychology and behavioral psychology. For example, PT does not narrowly assume that alterations in affective state necessarily and predictably precede changes in behavior, or vice versa. Rather, subjective state and social behavior are seen as interactive and mutually reinforcing, a view similar to the contemporary theory of “bidirectionality” used to explain brain-behavior relationships (Sperry 1993). The negative consequences of unstaged psychosocial approaches to schizophrenia cited earlier might contain inappropriate expectations for performance and assume capacities for abstraction, interpretation, and analysis that extend beyond the cognitive limits imposed by the schizophrenic diathesis. Thus, PT seeks to sequence and individualize the acquisition of adaptive strategies in a manner appropriate to the patient’s level of clinical recovery and capacity to acquire the technique. The therapeutic process moves from basic educational methods and the preliminary behavioral techniques of stress avoidance and reinforcement of others’ positive behavior (appropriate to the early stages of recovery) to more advanced and foresightful exercises in self- and other-awareness that follow the systematic, internal probing of emotional states. This goal seems most likely to be realized among patients who can achieve and maintain a remission of positive symptoms. Table 1 broadly illustrates some theoretical and methodological differences between PT and more traditional, insight-oriented psychotherapy, and Table 2 describes similar differences between PT and our earlier reported family psychoeducation approach. These differences speak to a relative emphasis between approaches rather than absolute distinctions. The overall objectives of PT are the forestalling of late (third year) relapse and the enduring enhancement of personal and social adjustment, outcomes that remain largely undocumented in the existing psychosocial treatment literature.

Phase I (Basic). Given the first-year success of our earlier social skills training and family psychoeducation approaches (Hogarty et al. 1986), we attempted to preserve these practice principles whenever possible. The goals of phase I thus entail a therapeutic “joining” with the patient and efforts to achieve clinical “stabilization.” Joining represents the establishment of a therapeutic alliance that communicates an empathic understanding of the patient’s difficulties as well as hopefulness about the patient’s recovery. Using patient participation, the therapist forms a “treatment contract” that reflects the objectives of each PT phase, conceptualized as steps needed to maintain survival without psychosis, gradually assume responsibilities, develop awareness and foresight, acquire appropriate coping strategies, and eventually rein-
Table 1. Differences in emphasis between traditional psychotherapy and personal therapy (PT)

<table>
<thead>
<tr>
<th>Traditional</th>
<th>PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpretive/analytical</td>
<td>Educational/constructionistic</td>
</tr>
<tr>
<td>Insight</td>
<td>Awareness and foresight</td>
</tr>
<tr>
<td>Maladaptive defenses</td>
<td>Prodromes and vulnerability to relapse</td>
</tr>
<tr>
<td>Character structure</td>
<td>Coping styles</td>
</tr>
<tr>
<td>Historical exploration</td>
<td>Internal probing of current affect dysregulation</td>
</tr>
<tr>
<td>Disorder, nonspecific</td>
<td>Disorder relevant</td>
</tr>
<tr>
<td>Nurture (person model)</td>
<td>Nature (disease model)</td>
</tr>
<tr>
<td>No pathophysiology</td>
<td>Neuropsychological deficits</td>
</tr>
<tr>
<td>Cognitive software</td>
<td>Cognitive hardware</td>
</tr>
<tr>
<td>Reflective</td>
<td>Directive</td>
</tr>
<tr>
<td>Meds/dose uncontrolled</td>
<td>Minimum effective dose</td>
</tr>
<tr>
<td>Environment uncontrolled</td>
<td>Environment structured</td>
</tr>
<tr>
<td>Unstaged (nondirective)</td>
<td>Staged (graduated skills)</td>
</tr>
</tbody>
</table>

Table 2. Differences in emphasis between family psychoeducation and personal therapy (PT)

<table>
<thead>
<tr>
<th>Family therapy</th>
<th>PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>External environment</td>
<td>Internal environment</td>
</tr>
<tr>
<td>Engineering to protect against vulnerability to relapse</td>
<td>Adaptive strategies to resolve prodromes</td>
</tr>
<tr>
<td>Stress reduction</td>
<td>Stress management</td>
</tr>
<tr>
<td>Standard problem-solving skills</td>
<td>Self-control skills</td>
</tr>
<tr>
<td>Situation specific, independent of affect</td>
<td>Affect specific, independent of situation</td>
</tr>
<tr>
<td>Stages: Homes tasks to community tasks</td>
<td>Stages: Internal coping to external application</td>
</tr>
<tr>
<td>Timing: Implicit criteria</td>
<td>Timing: Explicit criteria</td>
</tr>
<tr>
<td>Family centered</td>
<td>Patient centered</td>
</tr>
<tr>
<td>Effects treatment dependent</td>
<td>Effects maintained posttreatment?</td>
</tr>
</tbody>
</table>

tegrate into the community. Elements of the treatment contract address the issues of medication noncompliance, the inappropriate use of alcohol or illicit drugs, and the need to contact the therapist during crises. Central to this contract is the establishment of the minimum effective dose of maintenance antipsychotic medication (Hogarty et al. 1988) as well as of supplemental, thymoleptic medications when necessary (Hogarty et al. 1995). The strategies were designed to provide patients with the maximum prophylactic benefits of medication and the minimum side effects. Families are seen at least once to explain the treatment program and establish something of an "open door" policy with regard to questions about the illness and the treatment program.

While psychoeducation is an integral part of all individual sessions, as has been increasingly endorsed (Süllwold and Herrlich 1992), patients also participate in a formal workshop, typically involving four to six patients and comprising three 20-minute presentations interspersed with breaks. Offered when patients are reasonably stabilized, this initial workshop focuses on the nature of schizophrenia and its symptoms, and is supplemented by a psychosocial-biological model designed to explain the disorder and how treatments work. The vulnerabilities that patients might suffer are explained within this stress/diathesis model of schizophrenia. The need for medication and psychosocial treatment is discussed, as are the risks of depression, suicide, and potential psychotic episodes and the importance of maintaining a strong therapeutic alliance. Problems related to the use of illicit drugs, alcohol, and nonprescription medications are reviewed as well. Principles of supportive therapy are used throughout phase I (and later phases); these include active listening, acceptance, correct empathy, appropriate reassurance, the reinforcement of relevant patient perceptions and health-promoting initiatives, and reliance on the therapist for advocacy and prob-
lem solving during crises.

Additionally, phase I includes a strategy for the gradual resumption of responsibilities, principally involving self-care and household tasks, contained in the treatment plan. These initiatives are encouraged by specific homework assignments. Also making its initial appearance in phase I is the primary component of PT: a technique of increasing sophistication that we call "internal coping." In this basic phase, stressful situations volunteered by the patient are evaluated and identified for their potential as "internal cues" of affective dysregulation. Explicitly yet calmly, the therapist makes statements that draw the relationship between "stressors as triggers" and the cognitive, affective, behavioral, or somatic disturbances that follow. However, there is little or no active therapist "probing" of these sequelae at this time.

Finally, the rudiments of basic social skills training are introduced. These are nondemanding exercises in stress avoidance and the production of positive, prosocial statements by the patient. In training patients to express stress-reducing and socially reinforcing statements, the PT therapist attends to the nature of the patient's verbal content, vocal qualities, and nonverbal expressions.

Following exposure to phase I, which for most patients occurs over a 3- to 6-month period, PT patients need to meet the following criteria to proceed to phase II:

1. Positive symptoms and living conditions have to be reasonably stable and predictable, criteria that have been described elsewhere (Hogarty et al. 1988). Patients might continue to experience positive symptoms, but behavior cannot be significantly governed, for example, by hallucinations or delusions.

2. A maintenance (low) dose of antipsychotic medication should have been achieved for at least 2 months, in the form of fluphenazine or haloperidol decanoate whenever possible.

3. The patient's attention span should permit at least a 30-minute tolerance of discussions related to the illness, medication, and social skills, and be of sufficient quality to permit participation in role-play scenes.

4. The patient should have achieved a basic understanding that schizophrenia is an involuntary and environmentally sensitive, psychobiological illness.

5. There should be an established regularity in attending therapeutic sessions.

6. The patient should show evidence of using positive comments and avoidance techniques when indicated.

Criteria for meeting phase I goals are determined by monthly assessment on a Process Rating Scale completed by the primary PT therapist and medication nurse.

Phase II (Intermediate). The goals of phase II are the development of self-awareness regarding affective, cognitive, and behavioral states, and increasing personal competence at self-regulation and management. While the focus is deliberately internal, we try to avoid the precipitation of intense affects that could be destabilizing. As phase II strategies are implemented, a guiding principle is to maintain the stability criteria achieved in phase I.

Psychoeducation continues as an individual process, the content of which is formally summarized in a second workshop that is also divided into three distinct presentations. The first describes prodromal signs of relapse and gives patients an opportunity to discuss the similarities and differences in their own prodromal states that they learned earlier in PT sessions. The role of affective dysregulation and the associated "cues of distress," as well as self-protective coping strategies such as avoidance or distraction, are identified and described. The second session summarizes the adaptive techniques that have been or will be learned, including various relaxation strategies and intermediate social skills training, primarily social perception techniques and the fundamentals of conflict resolution. The third session is a novel presentation concerning vocational or vocational issues that patients might eventually encounter should they graduate to phase III. These issues include the need for and the process of adjustment to disability; the elements of a successful resumption of vocational interests; vulnerabilities to work, including reduced stamina and competing demands; relationships with coworkers and supervisors; and the acquisition of needed skills. Patients are provided with the opportunity to discuss their prior experiences with work and/or rehabilitation.

While the cornerstone of PT is the gradual enhancement of internal coping abilities, there is always a danger that the stabilization of positive symptoms might imply that the patient is ready for the more difficult tasks of active participation in treatment and the resumption of important instrumental and expressive roles. From past and painful experience (Goldberg
we have learned to introduce these goals gradually, recognizing that the less apparent vulnerabilities represented in the residuals of attention and arousal deficits might continue to place patients at high risk for decompensation. Thus, phase II is a gentle, slowly paced orientation toward reflection. It includes identification of the earliest internal cues associated with stress and the patient’s unique vulnerabilities, as manifested across a range of possible affective, somatic, cognitive, and behavioral responses. A deeper awareness of the environmental events that trigger these responses is sought, and an evaluation is made of the functional and dysfunctional responses that have constituted the patient’s typical repertoire of adaptive strategies in the past. For patients who are less able to verbalize the early warning signs of emotional distress, written lists of internal cues are provided as an aid to approximate identification. Typical self-protective strategies have included attempts to decrease sources of stimulation, including appropriate withdrawal or active distraction, particularly in the face of residual hallucinations or delusional beliefs that invite dialog.

Dysfunctional responses, such as arguments, threats against oneself and others, worry, demoralization, or obstreperousness, often arise as spontaneous but less helpful reactions to stress. Throughout internal coping exercises, the focus is always on the common denominator of subjective response, independent of the nature of the stressor itself.

As their awareness of internal cues increases, patients are provided with various basic relaxation techniques, including diaphragmatic breathing and guided imagery supported by the use of audiotaped instructions and music. Closely associated with the increased development of internal control is the introduction of intermediate social skills training exercises. These focus primarily on enhancing social behaviors judged to be deficient, particularly those related to the initiation and maintenance of personal interactions. More important is the development of appropriate social perception—that is, both correctly taking another’s “emotional temperature” and selecting a likely successful response before initiating an interpersonal encounter. Explicit worksheets are provided to facilitate this skill. Finally, very basic strategies in managing conflict are introduced.

For those able to master the intermediate phase techniques, the goals are typically achieved over a 6- to 18-month period. The patient is able to proceed to phase III if the following criteria are met:

1. Stabilization has continued that had earlier permitted entry into the intermediate phase.
2. A basic understanding has been achieved regarding the effect of stress on a vulnerable person with schizophrenia and the subsequent association of this effect with a potential psychotic episode.
3. Participation in role-play scenes has occurred regularly if social behavior deficits are prominent, and appropriate homework assignments have been completed.
4. There has been evidence of correct social perception in role-play sessions in the office and some evidence of its application outside the office.
5. There has been correct identification or at least a basic understanding of one vulnerable affect as well as one physical, affective, or cognitive cue.
6. Diaphragmatic breathing has been applied in the context of stress, and a degree of relaxation beyond baseline assessment has been achieved.

Attainment and maintenance of criteria are also determined each month on the Process Rating Scale.

Phase III (Advanced). To the extent that phase II highlights reflection and self-awareness of one’s internal cues and affective dysregulation, phase III turns outward. The therapeutic tasks become more focused on the relationship between the patients’ life circumstances and their internal state. A clear emphasis is placed on the reciprocal relationship between felt affect and its expression and the subsequent consequences elicited from significant others in the patient’s life. To date, the third treatment year has been largely reserved for most phase III activity. Crucial to phase III success is the concept of timing in vocational and resocialization initiatives. The pacing of reintegration is related to the maintenance of stability through the successful application of basic and intermediate coping strategies, and careful attention continues to be paid to the less apparent but abiding neuropsychological deficits represented by information-processing and social perception difficulties. Education and guided discussion that were initiated in phase II regarding the nature and likely functional significance of the patient’s prominent cognitive deficits are continued. The dialog often focuses on practical examples of impaired attention, memory, and social cognition. “One change at a time” remains a
priority of treatment as well. If new ventures prove to be unusually stressful, time is allowed to retreat to a less complex task that has been previously negotiated successfully. These social and vocational initiatives tend to become more successful over time as patient and therapist awareness of strengths and limitations increases.

Psychoeducation is accomplished without a workshop but continues to represent phase II themes, with a greater emphasis placed on the refined assessment of genuine, individual prodromes. With the realization that all fluctuations in mood, cognition, and neurovegetative functions are not bona fide signs of a new episode (Marder et al. 1994), patients strive for a greater sense of mastery and control by carefully identifying and managing unique prodromal symptoms that prior history has shown to be predictive of relapse. Further, because recovered and at least marginally successful patients tend to discount the prolonged need for maintenance chemotherapy (Hogarty et al. 1991), the necessity for continuing medication compliance and its mechanisms of action among recovered patients is again reinforced.

Internal coping, as mentioned above, is refocused to include the people and the social and vocational contexts that likely generate one's internal cues, as well as the subsequent response of others to the patients' felt and expressed affect. Advanced internal coping strategies include progressive relaxation training, which is designed to reduce autonomic arousal. From exercises involving all 16 muscle groups, patients attempt a shorter tension-release procedure using 7 groups, which, if successful, can eventually lead to relaxation based on the simple recall of the earlier sensations associated with the tension-release procedure (Bernstein and Borkovec 1973). Important studies (often limited to brief trials among hospitalized patients) support the efficacy of relaxation among schizophrenia patients (see, e.g., Acosta et al. 1978; Hawkins et al. 1980; Van Hassel et al. 1982; Rickard et al. 1993) or those with attention deficits (Weinstein and Smith 1992). While relaxation training techniques are generally accepted by PT patients, interpatient preferences are also accommodated. Discrete self-protective techniques, often those successfully employed by other patients, are introduced; these techniques particularly include those appropriate to vocational and interpersonal encounters, such as using public transportation, finding oneself in a crowd, or being introduced in a new social context.

At the heart of advanced social skills training are protocols of criticism management and conflict resolution based on the strategies offered by Michenbaum and Novaco (1985) and Burns (1980). These protocols address stressors identified in the EE literature (Kavanagh 1992) that seem particularly important for many schizophrenia patients to negotiate. Criticism management involves the correct identification and labeling of a criticism, an assessment of its validity, and a learned repertoire of verbal and behavioral responses designed to lessen the other person's intensity and to enhance the patient's social perception and negotiation skills. Patients are taught to coach themselves as to what is happening in a heated interpersonal exchange, what they need to do, and what steps they can follow to achieve their goals.

Finally, through the use of a simulated vocational setting, pre-vocational as well as supported work placements are used to bridge the gap between the acquired adaptive skills of PT and the real-life sources of provocation. Feedback from a rehabilitation specialist regarding the patient's successful negotiation of work and relationship demands is given to the primary PT therapist. Unsuccessful encounters often become the agenda for individual PT sessions. When patients demonstrate the independent application of various PT strategies in differing social contexts, sessions gradually become less frequent.

Initial Application of PT

Sample and Therapist Characteristics. We are currently testing PT in two controlled, 3-year trials. Out of 186 consecutively discharged patients who were judged to be protocol eligible (Research Diagnostic Criteria [Spitzer et al. 1978] schizophrenia or schizoaffective disorder, ages 17–55, IQ above 75, and without serious substance abuse or medical contraindications), 150 have been successfully enrolled in the current studies, 94 of whom were randomized to one of three PT cells. Ninety-one of the 150 patients have completed 3 years of protocol treatment, 37 remain in active treatment, and 22 discontinued treatment prematurely between 6 and 30 months. (The additional 36 eligible patients never engaged following hospital discharge, withdrew consent, or were administratively terminated before treatment exposure.) The 150 enrolled patients have participated in one of two concurrent trials. The first trial (trial A)
has included 96 consenting patients residing with family who were randomly assigned in approximate numbers to supportive therapy, PT, family psychoeducation/management, or a combination of the last two. The second trial (trial B) contrasts PT to supportive therapy among 54 consenting and randomly assigned patients who live independent of their family. The trial B sample is older and more impaired than the trial A subjects on many parameters of personal and social adjustment, both at baseline and throughout the study; however, many had higher levels of premorbid competence than trial A patients. The sample also includes a majority of female subjects, which is unusual in our experience.

Of 94 patients assigned to PT, 19 either never appeared for treatment or withdrew consent before treatment exposure, a rate of compliance that is similar to the 92 patients assigned to contrasting conditions, among whom 17 refused participation. While the study is ongoing, more than 90 percent of the 75 participating PT patients have completed phase I. Six patients have had persistent positive symptoms of such severity that progression to the intermediate phase of treatment has not been possible; that is, there has been a failure to meet stability criteria. Approximately 50 percent of PT-eligible patients have advanced from phase II to phase III. Some might question the eventual feasibility of training clinicians to the strategies of PT when only 50 percent of patients, more or less, would qualify for exposure to the advanced techniques. At this time, we would argue that the typical individual treatment experience of most schizophrenia patients rarely extends beyond the elements of supportive therapy and maintenance chemotherapy contained in phase I. Accordingly, more than 90 percent of schizophrenia patients might well profit from an enhanced (intermediate) psychotherapeutic experience, and in time, more than half of these patients may be able to acquire some degree of advanced coping strategies. Further, our studies are time limited by the constraints of available research support, an obstacle that does not operate in the context of most mental health services, where the opportunity for continued therapeutic gains among recovering patients is better ensured.

PT has been administered by two full-time master's-level nurse clinical specialists and three part-time Ph.D. clinical psychologists, all but one of whom has 15 to 21 years of experience working with schizophrenia patients, most spent with this research group. Weekly individual supervision has been provided within the context of a written treatment manual. In addition, case reviews have been held for 1 1/2 hours each week with the entire research team, and peer supervision has been conducted among PT therapists weekly for 1 hour, expressly to ensure a common understanding and application of practice principles. It should be stressed that these therapist meetings have been central to individualizing a patient's treatment experience. In that PT provides a "cafeteria" of potential interventions, not every patient has been exposed to each phase-specific technique at the same level of intensity. For example, while all patients have experienced deep breathing and imaging training, those who have found the experience unhelpful have been less likely to be offered or to accept systematic muscle relaxation. Similarly, other patients without disabling social skills deficits have not been required to participate routinely in sessions where the modeling, rehearsal, and feedback of appropriate social skills are emphasized. The application of different phase-specific interventions and their relationship to outcome will be the subject of a later process analysis.

The frequency and duration of treatment sessions has approximated the original intent to provide weekly PT sessions in the first year, with some greater spacing of contacts in subsequent years depending on patient needs. To control for the number of therapists and therapy hours among PT recipients, each primary PT (and family) therapist, whether psychologist or nurse, also had assigned to the case a nurse clinical specialist who independently supervised medication. (This was a research design concession needed to control the number of therapists; it was made because psychologists do not manage medication. It would not be a necessary staffing strategy in routine clinical practice.) Because the third year of study is ongoing, only treatment sessions for the first 2 years of study can be reported.

PT appears to have been well accepted. For the months of study participation, frequency of therapy sessions in the first year among the PT (alone) and PT and family therapy samples in trial A, as well as among the PT (alone) sample in trial B, averaged 2.92, 2.97, and 2.95 per month, respectively (2.95 ± 1.23 overall), with no significant difference in frequency of sessions among PT groups. Sessions generally ranged between 30 and 45

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minutes each. In addition, monthly medication management sessions of approximately the same duration averaged 1.88, 2.13, and 2.01, respectively, and often occurred on the same day as the PT session. Frequency of monthly supportive therapy sessions for control patients, which were provided by nurse clinical specialists and included medication management, averaged 1.97 ± 0.95 in trial A and 2.11 ± 1.34 in trial B.

In the second year, PT, medication management, and supportive therapy sessions decreased somewhat in number. PT sessions for the respective groups averaged 2.59, 2.43, and 2.62 per month (2.55 ± 1.21 overall), and separate medication management sessions averaged 1.58, 1.66, and 1.63 per month, respectively. Supportive therapy for controls also decreased to an average of 1.52 ± 0.89 (trial A) and 1.63 ± 0.92 (trial B) sessions per month. As a result, compliance with and acceptance of PT have been encouraging and appear greater than that reported in the long-term, outpatient psychotherapy reference study (Gunderson et al. 1984). Expressed in different terms, approximately 71 percent of all weeks in the first year contained at least one PT session per patient, as did 62 percent of weeks in the second year. Within the context of greatly diverse treatment approaches, time spent with clinicians in experimental and control conditions has been about as close as one could practically achieve. Although the control subjects generally had fewer sessions, these subjects were seen more often than appears customary in large public ambulatory programs.

Variance in the frequency of contact must await more detailed analysis. However, geographic distance and periodic noncompliance have contributed to fewer sessions than was planned among a subsample of patients. However, those who recovered from their index episode more rapidly and acquired PT techniques with greater facility often moved to more independent functioning and, in turn, to bi-weekly treatment sessions in the second and third years. This has been particularly true of patients who returned to work or school. When periodic crises have arisen, more frequent sessions have sometimes been necessary. The treatment sessions reported above do not include family or patient corollary contacts, the latter involving community agency involvement and telephone communications.

Problems in Implementation. When we first conceived this intervention, we naively presumed that if stress tolerance and adaptation could be achieved in phase I and II treatment sessions, patients could subsequently be exposed to diverse vocational, recreational, and interpersonal environments without the active intervention of the therapist. Our earlier family psychoeducation and social skills training limitations during the second treatment year (Hogarty et al. 1991) were believed to have followed upon the unprepared patient's extrafamilial ventures into environments that were "beyond therapist control." With the experience gained from PT, we have now come to better appreciate not only the extraordinary difficulties associated with a successful reintegration into community life, but also the likely necessity of the therapist's enduring presence as the recipient of community feedback, if not as the agent of negotiation, regarding prevocational, vocational, educational, and socialization initiatives. In point of fact, the phase III goals of PT have become a shared exercise between patient and therapist in managing personal vulnerability and stress during the process of reintegration into the larger social environment. The process has often resembled a "trial and error" exercise in mastering role complexity.

The application of PT among trial B participants has been far more difficult, given the absence of family support and residential stability. Noncompliance was initially greater among these patients until clinicians were eventually able to assume responsibility for the functions typically provided by family. But much more therapist activity in trial B has involved case management functions related to obtaining shelter, food, medical care, and entitlement benefits, including the resolution of crises that accompany these recurrent needs. This has left less therapy time that could be spent on PT principles.

There have been intermittent exacerbations of symptoms that disrupt the treatment process and invariably return the patient to a lower phase of treatment, such as that following rehospitalization and discharge. Otherwise, persistent positive symptoms that preclude stabilization and subsequent movement through the PT phases have been relatively uncommon. The rare cases that have occurred likely speak to the availability of clozapine, which has been introduced in the later years of study intake. Twenty-four study patients (12 PT cases and 12 non-PT cases) who have not responded well to typical neuroleptics have since been maintained on clozapine. It is unknown at this time whether the
course, adjustment, and level of skills acquired are systematically different among the subsample of clozapine-treated patients, although clinicians have commented on the stabilization challenge presented, as well as on the problems associated with such side effects as sedation and weight gain. Clearly, a subsample of clozapine-treated patients would not have been included in our prior psychosocial studies, and thus they represent a contemporary challenge to rehabilitation programs.

Although unmanageable drug or alcohol abuse rendered patients ineligible for study, the intermittent use of illicit drugs or problematic drinking has been described by therapists as a deterrent to progress through the PT phases. Compliance problems have also appeared more likely among patients who live more than 1/2 hours commuting distance from the clinic. Finally, while families reflecting low as well as high EE were included in the study, clinicians have often commented on the problems of engaging family support among low EE families and on the absence of warmth and positive regard exhibited toward the patient in such families. Future analyses will address how family and patient characteristics, including clinical state, substance abuse, physical distance, and medication type, alone and by interaction with treatment condition affect outcome.

Although the study is ongoing, preliminary outcomes have been encouraging. A hypothesized delay in late (third-year) relapse appears likely, as do incremental gains in personal and social adjustment over the 3 years of treatment. These initial observations are a basis for hope and optimism for an effective, disorder-relevant psychotherapy of schizophrenia and have provided the stimulus for this preliminary report.

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**The Authors**

Gerard E. Hogarty, M.S.W., is Professor of Psychiatry, Sander J. Kornblith, Ph.D., is Research Psychologist, Deborah Greenwald, Ph.D., is Research Psychologist, Ann Louise DiBarry, M.S.N., is Psychiatric Nurse Clinical Specialist, Susan Cooley, M.S.N., is Psychiatric Nurse Clinical Specialist, Samuel Flesher, Ph.D., is Research Psychologist. Douglas Reiss, Ph.D., is Director, Community Support Program, Mary Carter, Ph.D., is Project Coordinator, and Richard Ulrich, M.S., is Research Assistant Professor of Psychiatry (Biostatistician), Western Psychiatric Institute and Clinic, University of Pittsburgh School of Medicine, Pittsburgh, PA.

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