Multimodal Therapy in an Inpatient Setting

M.G.T. KWEE
Het Sint Joris, Delft, The Netherlands

H.J. DUIVENVOORDEN, R.W. TRIJSBURG, and J.H.THIEL
Erasmus University Rotterdam, The Netherlands

Inpatient Multimodal Therapy (IMT) is a residential treatment program, lasting a maximum of 36 weeks, for patients with severe neurotic symptoms. A group of 44 chronic obsessive-compulsive patients and a group of 40 chronic phobic patients were treated in order to assess the outcome and the process of treatment and to identify prognostic factors associated with the effect. At follow-up—on average, eight months after discharge—it was found that 60% had improved, 32% had remained the same, and 8% had deteriorated, indicating that, in general, the treatment was beneficial. That these effects were long-lasting is supported by the fact that, at follow-up, 78% of all patients were no longer receiving treatment, 18% were receiving outpatient or day treatment, and 4% were receiving inpatient treatment. Phobic patients appear to have gained more from the multimodal approach than did obsessive-compulsive patients, as indicated by the fact that the severity of symptoms decreased as they improved in rational thinking, assertiveness, and arousal. By contrast, obsessive-compulsive patients relapsed more than phobic patients did. This was attributed to the fact that the former gained less from the rational-emotive training, denied problems with assertiveness, and did not practice the acquired relaxation skills. It further appeared that a favorable outcome could be induced in patients who (1) expressed relatively mild symptoms in this otherwise severe group, (2) reported relatively few additional complaints, (3) could clearly indicate interpersonal problems, and (4) did not use psychotropic drugs. These prognostic factors are so widespread that not much weight can be ascribed to them. Yet they are useful for indication of IMT until better predictors are found.

Behavior therapy in a residential setting is usually based on operant learning principles called "token economy." Application is limited to chronic psychiatric patients, mentally retarded clients, and children with severe behavioral disorders. A neurotic population might benefit more from an approach that includes more dimensions than only that of manifest behavior. An alternative approach for these patients has recently been presented as a "therapeutic contract program." This is an inpatient behavioral program which, in a global sense, is directed toward acquiring self-control in a broad range of psychiatric patients. Within the framework of an operant contract of objectives, each patient receives therapy that includes relaxation exercises, cognitive restructuring, and training in social skills (Levendusky, Berglass, Dooley, & Landau, 1983).

Current Psychological Research & Reviews, Winter 1986-87, vol. 5, no.4, 344-357.

For almost 10 years in Delft there has been a department for behavioral psychotherapy, an inpatient unit at a general psychiatric hospital where a multimodal therapy program has been developed for an adult-neurotic population. "Inpatient multimodal therapy" (IMT) meets most of the prerequisites outlined above, but differs in population, method, setting, and treatment period. IMT (1) focuses on symptoms belonging to the neurotic spectrum, in particular, phobic and obsessive-compulsive behaviors, (2) follows the multimodal method systematically, (3) takes place in an inpatient setting, including individual, group and, when necessary, marital or family settings, and (4) lasts a maximum of 36 weeks (for single case studies, see Kwee & Duivenvoorden, 1985; Roborgh & Kwee, 1985).

MULTIMODAL THERAPY

IMT is the residential application of the multimodal assessment and therapy that was developed by A.A. Lazarus (cf. Kwee, 1981, 1984; Kwee & Lazarus 1986; Lazarus, 1981, 1984). From a multimodal perspective, human conduct can be broken down into seven interrelated modalities: behavior, affect, sensation, cognition, interpersonal relationships, and drugs (biological factors). As such, the acronym BASIC I.D. covers an entire inventory of complaints and problem behaviors. Such a "topographical analysis" constitutes the basis for a "functional analysis," that is, a hypothesis about the patient's dysfunctioning. Through the latter analysis insight is gained into the interdependence of different modalities in terms of antecedent, mediating, and consequent factors.

Multimodal assessment is followed by multimodal therapy, which approaches each behavioral dysfunction through a broad spectrum of interventions that have proven to be successful empirically. The inpatient-therapeutic approach is one of a number of activities and has the advantage that patients can work out their various problems simultaneously. The program can be compared to a school schedule, with the unit acting as a "boarding school for emotional reeducation."

Treatment: Contents and Strategy

Treatment consists of the following activities:

Individual therapy. In individual therapy, the therapist can employ interventions from the *Compendium of Multimodal Techniques* (Lazarus, 1981). Some of these—in particular, training in rational thinking, assertiveness, and relaxation—are also practiced in a group setting. The point of departure is the principle of technical eclecticism; that is, that the therapist can use any technique that has empirically proven to be effective and whose effectiveness can be explained in terms of social learning theory. Of particular importance are behavioral exercises *in vivo*—mainly response prevention and exposure/successive approximation—that are conducted by the cotherapists under direct supervision. Scientific proof, with respect to the beneficial effect of such an approach, has been provided by Marks (1977), among others. The

exercises are assigned and conducted within the framework of contracts in which specific treatment goals are set.

Marital therapy. When applicable, in the course of treatment, individual therapy can be transformed into marital therapy. Problems regarding the marital relationship can precede, or be a consequence of, neurotic complaints. Obsessive-compulsive behaviors, for example, can be used as a weapon in a power struggle between an aggressive-inhibited patient and his or her partner, while phobic-avoidance behavior can provide a dependent patient with a means of manipulating his or her partner. In such cases, marital therapy is indicated and is practiced as prescribed by Lazarus (1985).

The following methods of group training are applied at our Unit:

Evaluation training. Evaluation training takes place twice a week, before and after the weekend. The session after the weekend is meant for individual group members (1) to assess their ability to generalize what has been learned at the unit and (2) to draw up their work plan for the next week. The session before the weekend is meant for the patients to assume responsibility for success or failure for the things they have done during the week. It is also used to draw up a work plan for the weekend. By monitoring their own activities, patients gain insight into the connection between effort and result. They also receive feedback and reinforcement on their performances from the cotherapists (cf. Nelson, 1977).

Insight training. Insight training is a kind of individual therapy within a group setting which has been developed at the unit (Kwee, 1984). The psychologist discusses the life-span development and the functional analysis of each individual patient before the entire group. The rationale behind this training is that insights that emerge from the therapeutic team are, in every respect, worthwhile discussing with the patient before the group. Particularly important are the relationships between symptoms and actual life stress and factors that can be considered "secondary gain." Each patient gets a turn, once every twelve weeks, to discuss his or her insights with the other group members and to receive feedback from them. Group coercion, among other things, is then used to make the patient accept these new insights on both an emotional and intellectual level.

Rational training. Cognitive restructuring, according to principles of rational-emotive therapy, has an important place in the unit. Patients learn to assume a relativistic attitude instead of an absolutist one. Absolutist modes of thinking, such as thinking in an "all-or-nothing" fashion, making arbitrary judgments, overgeneralizing, and being negativistic, are modified through the technique of rational self-analysis and rational emotive imagery. Patients learn, with and from each other, to think in a functional way by learning to discriminate different levels of abstraction (i.e., descriptive, inferential, and evaluative; Kwee, 1985).

Assertiveness training. Lazarus (1973) defines assertiveness as the emotional freedom to say what one thinks or feels. A group setting has the explicit advantage of providing the opportunity to use role-playing, behavior rehearsal, and social reinforcement. Topics are suggested by the notes taken by patients during self-recording.

Patients learn social skills such as standing up for one's rights, making requests, initiating, continuing, and ending a conversation, etc.

Relaxation training. An important way of preventing stress and tension is through relaxation. In particular, the patient is taught relaxation as a skill through progressive relaxation, autogenic training, and controlled breathing. When necessary, relaxation can be induced through biofeedback, especially myofeedback and GSR feedback.

METHOD

Setting and Population

The IMT program mentioned above was developed at a unit with 18 beds and headed by a psychologist who administers all treatments. He is assisted by a psychiatrist, a second psychologist, and 10 cotherapists—4 psychology interns and 6 nurses—all of whom obtain their education through in-service courses and supervision.

At intake, it is decided whether a patient is suited for this kind of treatment. Only patients with severe symptoms can be placed into this unit; for example, a patient would be suitable if he or she exhibits obsessive-compulsive behaviors during the night or cannot leave the house because of some debilitating phobia. Placement in the unit is one phase of the patient's total process of treatment. It can precede or follow a phase of outpatient or day treatment. The criterion for discharge is a durable decrease of symptoms to such an extent that therapy is no longer needed or can be replaced by outpatient treatment.

During the first four years, 111 patients were assigned to the unit. Data sufficient for a statistical analysis were gathered from 98 of these patients. Twelve of them terminated treatment within six weeks after they were assigned to the unit.[1] Of the remaining 86 patients, two did not meet the diagnostic criteria. Thus data from 84 patients—44 obsessive-compulsive and 40 phobic—were analyzed. In general, it can be said that these patients had been "given up" by those who administer outpatient treatment programs, usually behavior therapists.

It appeared that the complaints of 75% of the patients could be considered chronic, meaning that they had existed for more than four years. The severity of the complaints was assessed by way of former treatments. Ninety percent had had some form of treatment during their lives (60% day treatment or outpatient, 25% both outpatient and inpatient, and 5% inpatient). Of the 84 patients, six males were obsessive-compulsive and 11 males were phobic patients. The age of the patients ranged from 18 to 60 years and more than 70% of them belonged to the age bracket of 21 to 35 years. Nearly 75% lived together with a spouse and more than 25% were single.

Procedure

The questions that are raised in this study are: (1) What are the short- and long-term effects of IMT and how are these brought about?; and (2) Which psychosocial

factors can predict these effects? To answer these questions, a treatment package strategy of research (Kazdin & Wilson, 1978) was followed. Altogether, there were 5 points of measurement: at intake, at admission into the unit, 12 weeks after admission, at discharge, and at follow-up (9 months later).

In order to answer the questions regarding treatment effects, the following instruments were selected:

1. The Leyton Obsessional Inventory (Cooper, 1970), which serves as the criterion for obsessive-compulsive neurosis.
2. The Fear Survey Schedule (Wolpe & Lang, 1977), which serves as the criterion for phobic neurosis.[2]
3. The Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974), a measure of general complaints.
4. The Personal Orientation Inventory (Shostrom, 1966), a measure of mental health.
5. The General Human Opinions Scale (Kleijn, Van der Ploeg, & Kwee, 1983), a measure of rational and/or relative thinking. (AMO)
6. The Stimulus Response Questionnaire (Endler, Hunt, & Rosenstein, 1962), a measure of emotional arousal. (SRQ)
7. The Rathus Assertiveness Schedule (Rathus, 1973), a measure of assertiveness. (RAS)

In order to make comparisons between measurements possible, raw scores were transformed into standard scores with a mean of 50 and a standard deviation of 10. The measurement at the time of admission served as the point of reference.

To answer the question regarding prognostic factors, the following instruments were administered at the time of admission:

1. The Multimodal Life History Questionnaire (Lazarus, 1981; Kwee & Duivenvoorden, 1985), which is used to collect anamnestic data.
2. The Wechsler Adult Intelligence Scale (Wechsler, 1958), which measures intelligence.
3. The Eysenck Personality Inventory (Eysenck, 1963) and the Dutch Personality Inventory (Luteijn, Starren, & Van Dijk, 1975), two personality tests.

RESULTS

Outcome

The short-term therapy effect was measured by comparing the relative change in the measurement at discharge with that at admission; the long-term effect by comparing the measurement at follow-up with that of the criterion at admission. By basing the measurements on relative change, the influence of differences in values at intake can be controlled. For both discharge and follow-up measurements, improve-

TABLE 1
Percentages of Obsessive-Compulsive and Phobic Patients Who Improved, Remained the Same, and Deteriorated at Discharge and at Follow-up (in percent)

RESULT	OBSESSIVE-COMPULSIVENESS		PHOBIA		TOTAL	
	Discharge ($n = 44$)	Follow-up ($n = 31$)	Discharge ($n = 40$)	Follow-up ($n = 31$)	Discharge ($n = 84$)	Follow-up ($n = 62$)
Improved	78	64	52.5	55	65	60
Remained the same	18	26	35	39	27	32
Deteriorated	4	10	12.5	6	8	8

ment was defined as a relative change in measurement that is equal to or greater than 10, and decline as a relative change less than 10, whereas 10 represents one standard deviation. Scores in-between these limits reflect no change. Internal validity was determined by calculating whether there was regression towards the mean. Therefore, relative change at discharge and at follow-up was correlated with the score at admission. No regression was found ($r = 0.18$ and 0.36, respectively).

Table 1 shows that from all patients ($n = 84$), 65% had improved, 27% had remained the same, and 8% had deteriorated at discharge. Given the finding that the waiting time did not bring about any substantial changes for 84% of the patients, these results can be considered good. In addition, the results at discharge were significantly better than they were 12 weeks after admission ($p < 0.001$).

Table 1 also shows that, at follow-up, 60% of all patients had improved, 32% had remained the same, and 8% had deteriorated. Compared to the results at discharge, there was less improvement. It can be concluded, then, that there was limited relapse. This lends support to a stable and long-lasting treatment effect. This conclusion is further supported by the finding that, at the 9-month follow-up, 78% of all patients were not under any treatment, 18% were receiving outpatient or day treatment, and 4% were under inpatient treatment at the unit once more or elsewhere.

Because data from 13 patients were unavailable at follow-up, the number of obsessive-compulsive patients was reduced from 44 to 31 (see Table 1); 64% of them showed a stable, positive treatment effect, 26% remained the same, and 10% deteriorated. Compared to results at discharge, at follow-up, scores returned to the level of the measurement that was taken 12 weeks after admission [$d(-.51)$; $p < 0.01$], so that it can be concluded that some relapse had taken place.

For similar reasons, the number of phobic patients at follow-up was reduced from 40 to 31 (see Table 1). In this group, 55% showed a stable, positive treatment effect, 39% remained the same, and 6% deteriorated. A delayed effect should be mentioned here in that some of those whom, at discharge, had deteriorated, later showed improvement.

In order to understand how the therapy effect was established, the possible relationship between the criterion variables and the other therapy variables, and the magnitude of such a relationship, was studied. The relative changes in the criteria at discharge and at follow-up were correlated with those of the therapy variables.

TABLE 2
Intercorrelations (above 0.40) Between Relative Changes in Obsessive-Compulsiveness and Therapy Variables in Obsessive-Compulsive Patients at Discharge and at Follow-up

Variables	Discharge	*p*	Follow-up	*p*
1. Phobia	.62	< 0.001	.54	< 0.001
2. General complaints	.55	< 0.001		
3. Self-actualization	.40	< 0.01		
4. Rational thinking				
5. Assertiveness	.64	< 0.001		
6. Emotional arousal				

TABLE 3
Intercorrelations (above 0.40) Between Relative Changes in Phobia and Therapy Variables in Phobic Patients at Discharge and at Follow-up

Variables	Discharge	*p*	Follow-up	*p*
1. Obsessive-compulsiveness	.51	< 0.001		
2. General complaints	.80	< 0.001	.86	< 0.001
3. Self-actualization	.48	< 0.05	.58	< 0.01
4. Rational thinking	.62	< 0.001	.65	< 0.01
5. Assertiveness	.63	< 0.001	.75	< 0.001
6. Emotional arousal	.53	< 0.001	.55	< 0.001

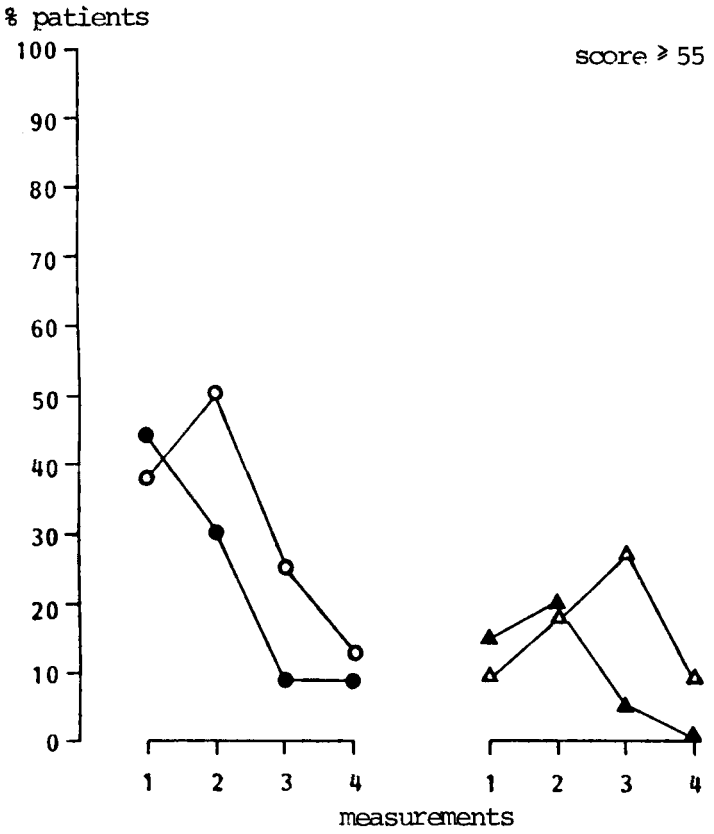
At discharge, the scores of obsessive-compulsive patients showed positive intercorrelations between the criterion and phobia, general complaints, self-actualization, and assertiveness (see Table 2). Thus, at discharge, IMT proved to have been effective to some degree. At follow-up, however, most of this effectiveness was no longer evident. This finding is related to the earlier one that obsessive-compulsive patients, at follow-up, had relapsed to a larger degree than phobic ones. This finding also lends support to the idea that a thorough change in the BASIC I.D. is a prerequisite for a long-lasting reduction in the number of complaints.

At discharge, the scores of phobic patients showed consistent, positive intercorrelations between the criterion and obsessive-compulsiveness, general complaints, self-actualization, rational thinking, assertiveness, and emotional arousal (see Table 3). This means that the objectives of IMT were met. Essentially the same intercorrelations were found at follow-up. The only exception was with regard to obsessive-compulsiveness. However, in the case of phobics, obsessive-compulsiveness does not appear to be a relevant factor. Thus, IMT, by inducing changes in different modalities, was able to bring about a long-lasting reduction in complaints among phobic patients.

Process

The process of change in 3 important modalities—rational thinking, assertiveness, and emotional arousal—was studied to gain additional insight into the reasons for

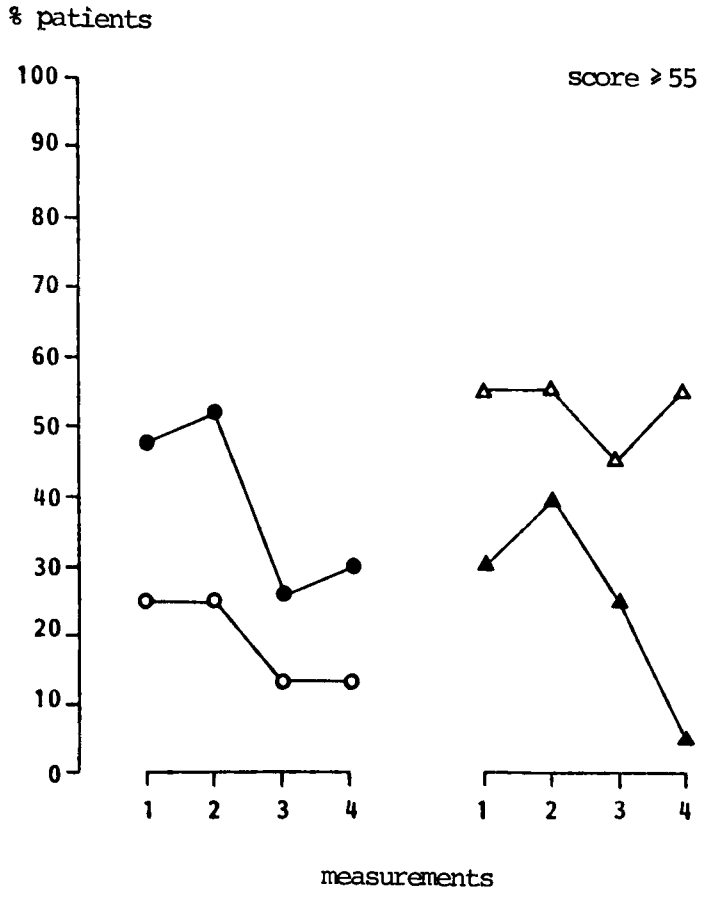
FIGURE 1
Process of the Variable Rational Thinking in Relation to Effects on Obsessive-Compulsive Patients Who were Successful (•) ($n = 23$) Versus Those Who Failed (o) ($n = 8$) and on Phobic Patients Who were Successful (▲) ($n = 20$) Versus Those Who Failed (△) ($n = 11$)



the relapse in obsessive-compulsive patients and for the steady progress in phobic patients. To this end, the process, in terms of measurements at intake, at admission, at 12 weeks after admission, and at discharge, was examined in relation to the measurement at follow-up. On the basis of relative change of the criterion at follow-up, patients were divided into two groups, namely success (n, obsessive-compulsiveness = 23; n, phobia = 20) and failure (n, obsessive-compulsiveness = 8; n, phobia = 11). The latter group included patients who remained the same. Similarly, the scores on the therapy variables were assigned to two groups, namely, favorable (< 55) and unfavorable (≥ 55). Figures 1 and 2 show the percentages of patients with an unfavorable score on the above variables.

With regard to rational thinking, it was found that all patients benefitted from the training, but to varying degrees (Figure 1). Patients who were successful improved

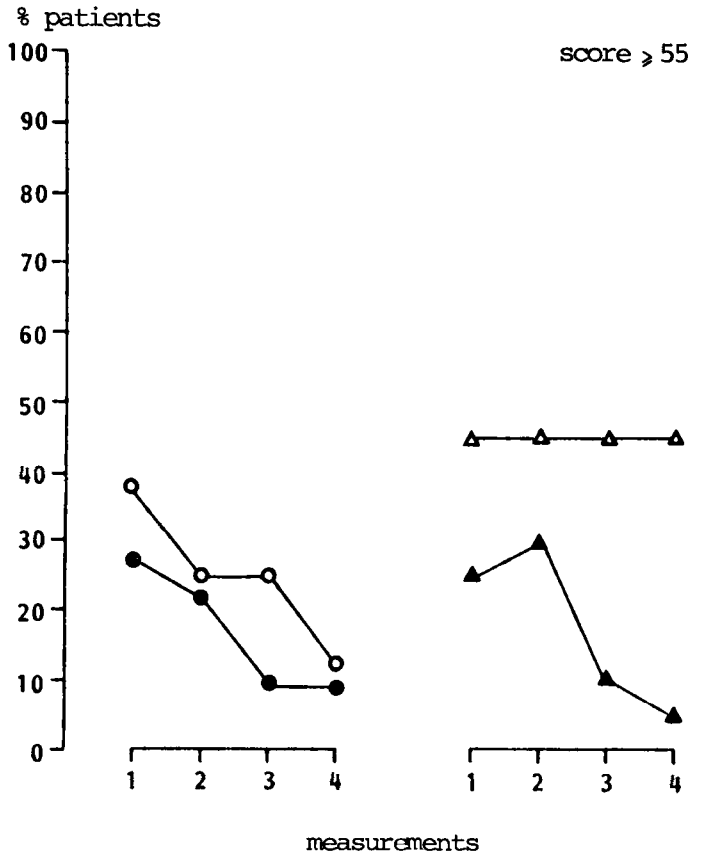
FIGURE 2
Process of the Variable Assertiveness in Relation to Effects on Obsessive-Compulsive Patients Who were Successful (•) ($n = 23$) Versus Those Who Failed (o) ($n = 8$) and on Phobic Patients Who were Successful (▲) ($n = 20$) Versus Those Who Failed (△) ($n = 11$)



more and faster than those who failed. Phobic patients appear to have suffered less from irrational thinking than obsessive-compulsive ones did. This might account for the fact that the former retained more of what they had learned during training than the latter did.

For assertiveness training, successful phobic patients appear to have benefitted more than successful obsessive-compulsive patients (Figure 2). It is worth nothing that for obsessive-compulsive patients who were successful, assertiveness training had less effect than for obsessive-compulsive patients who failed. The latter claimed that, in general, they were more assertive to begin with than the former. The question is whether they denied or simply were not able to distinguish between assertiveness and aggressiveness. From clinical observations it became apparent that obsessive-compulsive patients, in general, held back aggressive behavior, one possible reason why it was difficult for them to acquire assertiveness.

FIGURE 3
Process of the Variable Emotional Arousal in Relation to Effects on Obsessive-Compulsive Patients Who were Successful (•) ($n = 23$) Versus Those Who Failed (o) ($n = 8$) and on Phobic Patients Who were Successful (▲) ($n = 20$) Versus Those Who Failed (△) ($n = 11$)



As for emotional arousal, it is shown in Figure 3 that successful patients gained from the relaxation training. More of the successful phobic patients acquired relaxation skills better than those who failed. The same applies to obsessive-compulsive patients, although the difference between those who were successful and those who failed was smaller. The fact that obsessive-compulsive patients could not manage to retain their relaxation skills should not be attributed to the training, but rather to the fact that they did not practice them enough.

Predictability

The last part of the study was meant to identify factors that could predict the outcome of the therapy.

TABLE 4
Prognostic Factors for Long-Lasting Favorable Effects

Obsessive-Compulsiveness	Phobia
1. Mild symptoms	Mild symptoms
2. Few additional complaints	Few additional complaints
3. Clearly indicates relational problems	Clearly indicates relational problems
4. No use of psychotropic drugs	No use of psychotropic drugs
5. High intelligence ($F = 7.24$; $p < 0.001$)	Low arousal ($F = 3.26$; $p < 0.05$)
6. Optimistic attitude ($F = 5.27$; $p < 0.01$)	Introvert and submissive ($F = 6.43$; $p < 0.001$)
7. Some degree of self-actualization ($F = 5.10$; $p < 0.01$)	Realistic self-image ($F = 14.52$; $p < 0.001$)

To start with, "drop-outs" were examined. These patients were characterized by the fact that they were all relatively young ($M = 35$ years), either single or divorced, unable to provide their own income, and in the lowest educational and occupational brackets. Furthermore, they showed an obvious lack of motivation, giving rise to the question of whether "secondary gain" arguments could have played a role in their quitting the program.

It was not as easy, however, to predict in psychosocial terms which patients would complete the total IMT program or which ones would benefit from it. Stepwise multiple-regression analysis indicates that the chance for a favorable therapy effect is greatest for both obsessive-compulsive and phobic patients when they (1) express relatively mild symptoms—either obsessive-compulsive or phobic—in what is otherwise a severe group, (2) report relatively few additional complaints, (3) can clearly indicate interpersonal problems, and (4) do not use psychotropic drugs. Obsessive-compulsive patients who benefitted from the total therapy program were characterized by a high level of intelligence, an optimistic attitude, and a certain degree of self-actualization, while phobic patients in this category were characterized by a low level of emotional arousal, a socially introverted and submissive attitude, and a self-image that was less favorable than actually existed (see Table 4).

These prognostic factors, although meaningful, were studied within a small group, and because they are widespread, relatively little weight can be ascribed to them.

DISCUSSION

IMT is psychotherapy in a residential setting. Its major objective is to provide the patient and/or group of patients with a treatment program which is tailor-made and uses the clinical situation to its fullest advantage. The method uses a structured method, both in therapeutic approach and scheduling, within the framework of clearly defined roles for patient and therapist. The approach is based on a multimodal model of assessment and therapy that was developed by Lazarus (1973). His multimodal orientation was conceived after previous follow-up studies of unimodal and bimodal behavior therapies (with 112 cases) had shown a relapse rate of 36%

(Lazarus, 1971). Patients who fall into this latter category, and who are usually treated—to no avail—in an outpatient, day treatment, or inpatient setting, were the ones who were placed into this particular unit. Given the fact that 60% of such chronic and severe cases appear, at follow-up, to have benefitted from IMT, it can be concluded that multimodal therapy, in a residential setting, was successful.

The design of this study about the outcome and the process runs parallel to the multimodal concept of human conduct and the 3-systems theory of emotion that has recently become popular (see Hugdahl, 1980). The BASIC I.D. is, in fact, a more refined version of a system consisting of three categories, namely, thinking, feeling, and acting. It is argued that these are relatively independent from one another and, thus, have to be treated separately. The results underscore the fact that long-lasting effects can be achieved by changes in all modalities, whereas relative failure can be ascribed to insufficient changes in modalities. In particular, there was more relapse with obsessive-compulsiveness than with phobia. This most probably can be attributed to the fact that a decrease in symptoms was not associated with an increase in rational thinking and assertiveness, nor with a decrease in arousal.

In addition, there were three other noteworthy findings regarding obsessive-compulsive patients: (1) They showed a decrease in general complaints between intake and admission [$d(.54)$, $p < 0.001$], (2) they showed an increase in rational thinking at admission [$d(.66)$, $p < 0.001$], and (3) they showed relapse at follow-up with respect to emotional arousal and to the criterion [$d(-.63)$, $p < 0.001$]. As far as (1) is concerned, it might have been that simply hoping to gain from their future placement into the unit and/or treatment was, in itself, enough to reduce complaints. With regard to (2), it might have been that the information about the therapy led to studying the books on rational-emotive self-help that were distributed at intake with all its positive effects. As for (3), it is plausible to conclude that the relaxation skills had not been internalized sufficiently or had been unlearned, and/or that an increase in symptoms caused an increase in emotional arousal.

Relapse could have been brought about because problems related to antecedent factors or current life stress were left either unresolved or insufficiently resolved. It might also have been that, in proportion to the severity of the symptoms, these patients did not have enough opportunities to internalize the problem-solving skills in which they were trained. As a result, the patients were not adequately equipped when confronted with new stressors and they reassumed their former symptomatic behavior. Prolongation of the admission period would not be advisable, however, since this might engender the danger of hospitalization. One solution could be a gradual phasing out of the therapy by referring patients to either outpatient or day treatment based on the same therapeutic principles.

With respect to the number of patients who showed a negative outcome (8% of the entire group), this figure is comparable to the 5-10% that is mentioned in the literature (Strupp, Hadley, & Gomes-Schwartz, 1977). In the present study, three obsessive-compulsive patients showed deterioration at follow-up and two phobic patients showed consistent deterioration, starting at discharge. The clear impression one forms about these patients is that secondary gain was the major factor responsi-

ble for the negative results. Functional analyses demonstrate that these patients, without exception, gained in a material and/or social sense from their "illness." It was frequently found that such a patient would be financially dependent, without any prospect for a job, after improvement through treatment. By complaining, these patients could manipulate their environment and shirk all responsibility without reproach. Clinical observation indicated that the patients who improved—unlike the five referred to above—succeeded in confronting their own secondary gain and finally gave up their chronic complaining. This appears to be attributable to the insight training they had received. In this training, patients, under social pressure from the group, attempt to substitute the perceived advantages of their, as yet, uncertain "health" for those of their former complaint behavior.

The results of this study do not indicate fundamental changes in the treatment strategy of IMT. This is all the more true because the results in the area of general complaints justify the conclusion that improvement was also brought about regarding complaints other than obsessive-compulsiveness and phobia (e.g., somatization). This conclusion is important because it forms the basis for the claim that symptom substitution clearly might not have taken place. This phenomenon was not, or only rarely, observed.

In order to produce better results than those which have been presented here, the following recommendations could be made: (1) to intensify group training, in particular, assertiveness training; (2) to introduce individual treatment in the form of exposure and response prevention more strictly; and (3) to put emphasis on programming generalization of the newly-acquired problem-solving skills.

On the basis of the results of predictive factors, it remains unclear whether these results would have stood up to criticism had actual cross-validation occurred. It is known from the literature (Garfield, 1980) that psychosocial factors, in general, can predict treatment effects to a limited extent only. In the present study, a number of meaningful prognostic factors were found; however, these are so widespread that little weight can be ascribed to them. Nevertheless, they can be useful for indication of IMT. Meltzoff and Kornreich's conclusion (1970) appears to still be valid: "The matter of who will profit from psychotherapy is undoubtedly complexly determined and examination of any simple patient variable in its relationship to outcome is apt to account for only a small portion of the variance" (p. 229).

It is advisable to search for "different" factors. Given the nature of IMT, which could be considered a process of emotional reeducation, future research should look into the predictive power of factors regarding parental rearing. Preliminary research has started in the form of a follow-up study.

NOTES

Date of acceptance for publication: October 17, 1986. Address for correspondence: Dr. Maurits G.T. Kwee, Klinisch-Psycholoog Voor Psychotherapie, Alpenroos 2, 2317 Ex Leiden, The Netherlands.

1. This number is considerably smaller than that found for outpatient psychotherapy (40%), and clinical psychiatric treatment in the case of voluntary assignment (55%) (Baekeland & Lundwall, 1975).

2. Discriminant analysis shows that these criterion variables correspond to a degree of 86% with the applied ICD-9 (WHO, 1977)/DSM-III (APA, 1980) classification systems.

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