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The multidimensional nature of counseling and psychotherapeutic treatment and the wide choice of intervention strategies underscore the desirability of conducting treatment according to preformulated treatment plans. The extent of correspondence between counselors' pretreatment plans for using each of 14 intervention strategies and their subsequent use in treatment was examined for a group of 6 counselors and 41 clients. Counselors completed a treatment plan for each of their clients, indicating the client's problems and the extent to which the counselor planned to use each of the 14 interventions for each problem in each of three phases of treatment. These ratings were then compared to counselors' post-treatment ratings of the extent of actual use. Results indicated that the extent of correspondence was moderated by the phase of treatment and by problem area. High correspondence was found for the initial and last phases of treatment, and for working on personal and situational client problems, as distinct from interpersonal and marital problems. Of the 14 intervention strategies whose extent of use was rated by counselors before and after treatment, half evidenced high correspondence. The findings suggest that neither the substantive nature of the strategy nor the extent of its overall use in treatment seem related to correspondence. (Author/NRB)

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Correspondence Between Planned and Subsequent Use of Interventions in Treatment

Aaron Rosen
Washington University
St. Louis, Missouri

and

Elizabeth Mutschler
University of Michigan
Ann Arbor, Michigan

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Correspondence Between Planned and Actual Use of Interventions In Treatment

Counter to then prevailing assumptions that viewed counselor interventions as uniform, Kiesler (1966) pointed out that a variety of strategies need to be considered and employed selectively in order to obtain desired changes with a particular client. He also suggested that not only may there be a need to use different interventions with different clients, but since "therapy is a sequential procedure," (Kiesler, 1966, p. 129), clinicians need to consider the dimension of time and to vary their interventions according to the phase of treatment.

Current conceptions of counseling and psychotherapy have begun to acknowledge the complexity of the treatment process, the need for multidimensional interventions, and the progressive nature of achieving client change (cf. Garfield and Bergin, 1978; Krumboltz, et al., 1979). Kiesler's warning regarding the prevalence of myths of uniformity and their negative influence on the conduct and evaluation of psychotherapy have been increasingly heeded and have resulted in a more sophisticated conception of the treatment process and its evaluation (cf. Bergin and Lambert, 1978).

Recognition of the multidimensional nature of treatment and the need to choose interventions from among alternative techniques underscore the desirability of conducting treatment according to preformulated treatment plans (e.g., Cormier and Cormier, 1979; Gottman and Leiblum, 1974). A treatment plan is a counselor's guide to action. It involves selection of ultimate outcomes as the criteria of success, delineation of intermediate and instrumental outcomes along the process of client change and specification of the interventive strategies to be employed in relation to each outcome (Rosen and Proctor, 1981).

Exhortations for systematic treatment planning are in part predicated on the assumption that if counselors systematically plan their treatment and specify what

interventions they will use in relation to desired outcomes, they would be more likely to follow these plans. Hence, the desirability of urging counselors to engage in treatment planning is dependent not only on assumptions regarding the validity of the theoretical propositions and the interventions that are employed in relation to a case, but also on knowing whether counselors do in fact pursue their preformulated treatment plans. It has been generally assumed that counselors can forecast accurately the type of interventions that they will use as well as the timing of these interventions. In fact, such assumption is implicit when procedures for client initiation into treatment and its process (role induction) are advocated (e.g., Lieberman, Yalom and Miles, 1973; Strupp and Bloxom, 1973). The present investigation addresses this assumption and examines the extent to which counselors' plans for using a variety of intervention strategies are carried out in the course of treatment.

A number of factors in addition to availability of clinically relevant knowledge may affect the extent to which counselors can adhere to a treatment plan. A relatively stable or predictable client environment will facilitate adherence. Similarly, if clients present well defined problems and/or desired outcomes planning can be sooner undertken and better adhered to than if complaints are complex or amorphos (Cormier and Cormier, 1979). In the latter instance, planning beyond the initial phase of problem formulation and goal setting may be difficult as well as inadvisable. But even in cases with relatively well defined problems and outcomes, counselors' adherence to preplanned interventions may be expected to decrease as treatment progresses overtime, and that in response to ongoing assessment and feedback regarding achievement of treatment outcomes (c.f. Rosen & Proctor, 1981).

Conceiving of treatment as temporally differentiated into phases has been common for expository purposes (e.g. Cormier and Cormier, 1979) and has also been documented empirically (Lennard and Bernstein, 1960; Psathas and Hardert, 1966). Since it is likely that counselors will adhere more to their preplanned interventions in the initial rather

than in later phases of treatment, the correspondence between the planned and subsequent use of interventions was investigated also according to treatment phase. Specifically, the following questions were addressed:

a) Does the extent of correspondence between planned and subsequent use of intervention strategies vary between the initial, middle and last phases of treatment?

b) Does the correspondence between planned and subsequent use of strategies vary in relation to the problem being treated?

c) Does the correspondence between planned and subsequent use differ by the type of stategy being employed?

Method

The study was conducted as part of a demonstration project aimed to teach practitioners a systematic approach to treatment planning and to treatment evaluation. Six experienced clinical social workers, two men and four women, doing individual and family counseling at a Family and Children's Service Agency participated in the study. Four clients from each counselor's caseload were randomly selected for participation in the project. For a one year period, clients who terminated were replaced randomly so that each counselor had four participating clients. Over that period, a total of sixty-two client units, families or individual clients, participated. The data for the subsequent analyses are based on 41 clients who were in treatment longer than one week and for whom before- and-after-treatment ratings of strategy use were made by the counselors. Treatment duration ranged from two weeks to eighteen months with a median length of 14.8 weeks.

Procedure

Clients were assigned to counselors following a short intake, usually by telephone. After the first interview with a client, counselors were asked to fill out a treatment planning form indicating: 1) the client's problems in need of resolution, and 2) the extent to which they would employ each of fourteen intervention strategies listed on the planning form for each of the identified problems. Counselors made this estimation on a four point Likert-type scale ranging from "not at all" to "very much," with separate entries for the beginning, middle, and end phases of treatment. At the completion of this task the treatment planning forms were collected and kept by the researchers. Following the last treatment session with a client, each counselor completed a similar form; except that at this time counselors were asked to indicate the problems for which resolution was actually sought, and for each problem, to rate the extent they had actually used each strategy during each phase of treatment.

Since the anticipated length of treatment and the duration of each phase of treatment would vary by type of client and problem, standardized boundaries for defining the three phases were not employed. Rather, the definition of what constituted the beginning, middle and end phases of treatment was to be determined by each counselor according to his/her theoretical orientation and the particular client worked with. In this manner consistency in each counselor's definition of the unit of analysis (phase of treatment) for the pre- and post- treatment estimation of extent of strategy use with a given client, albeit subjective, was enhanced. Because changes in the method of judgement of treatment events as well as variations in the source of information regarding these events are among the factors which potentially endanger the reliability or validity of clinical measurement (Fiske, 1977; Kazdin, 1980), each counselor rated his/her own strategy use rather than ratings by independent judges. Hence, because the same method of rating was used before and after treatment, and counselors rated their own work, lack of correspondence between ratings of the anticipated and subsequent strategy use is unlikely to have been influenced either by differences in method or source of ratings.

Intervention Strategies

As part of the larger demonstration project and prior to their beginning of systematic treatment planning with clients, the counselors were asked to list and describe all the strategies which they might use in treatment with their clients. Based on and exhaustive of these responses, the following list of fourteen intervention strategies was compiled:

1. Connecting Clients with Resources. This strategy involves discussion with the client about resources outside the agency. The counselor may provide the client with information about these resources, problems involved in getting them, or reasons why the client may want to use them.
2. Exploration. This strategy involves eliciting information from the client to clarify his or her situation.
3. Modeling. Modeling refers to the counselor engaging in behaviors which he/she feels are desirable for the client to practice. For example, the counselor may express feelings as a way of getting the client to become more free in expressing feelings.
4. Role Play. This strategy involves engaging the client in a rehearsal of a behavior or asking the client to take the place of another person and imagine how that person would act or feel.
5. Structuring. The counselor explicitly indicates some direction for client behavior during the interview such as specific focusing responses which explicitly direct the flow or focus on a certain issue.
6. Interpretation. This strategy presents the client with causal links between behavioral events, either his own, other's behavior, or both. Interpretation gives the client a new, potentially more functional way of viewing herself/himself and facilitates insight into behavioral dynamics.

7. Enhancing Client's Awareness of Own or Other's Behaviors. Counselor statements are aimed at (a) increasing the client's awareness of the nature of his own behavior or of his interactions with others (b) increasing client's awareness of others' and of his own situation.

8. Enhancing Client's Communication. This strategy refers to the counselor encouraging the client to express herself/himself more, or to dwell on and discuss certain issues within the interview. The counselor conveys interest in specific areas by encouraging the client, for example, to talk more about his job.

9. Enhancing Ventilation. This strategy refers to the counselor encouraging clients to express their emotions in relation to certain issues, for example, asking a client to talk about his anger toward his parents.

10. Client Record Keeping and Self-Monitoring. This strategy involves the counselor's having the client systematically gather information, for example, keeping a journal which focuses upon behavior in specific problem situations.

11. Reassurance (Support). This strategy involves accepting the client's feelings or behavior as appropriate. Reassurance can convey acceptance to the client and can increase feelings of confidence, self-respect and adequacy.

12. Responsive Communication (Attending). The counselor conveys a willingness to listen, expresses interest, and provides feedback to the client that his/her messages are understood.

13. Behavior Shaping. The counselor's focus is on gradually changing specific client behaviors, thoughts or feelings. This strategy may include providing the client with negative or positive judgments, or selectively disregarding or not responding to certain client communications. For example, a counselor may praise a client for specific accomplishments, while disregarding other behaviors.

In order to enhance common strategy use the counselors practiced the application of these strategies and their definitions with their ongoing cases before they embarked on the study proper. When the study began the counselors were instructed to use only these fourteen categories to plan their treatment and describe their interventions. The fourteen strategies were listed on the treatment planning forms and on the forms completed at the end of treatment.

Problem Areas

The ratings of the extent of planned, as well as of subsequent strategy use were made separetly for each specific client problem that was judged by the counselor as warranting intervention. Because specific problems differed among clients, problems were grouped into four general areas in order to facilitate comparisons and data analyses. The problem areas were the following: a) personal problems which concern an individual client only, such as anxiety, low self esteem, depression; b) marital problems, involving relationships between the client and his/her spouse; c) interpersonal problems, involving relationships with persons other than spouse; and d) situational problems, such as employment and housing.

Data Analyses.

The basic data for analysis were a counselor's rating of the extent he/she planned to use each strategy for each specific problem in each of the three phases of treatment, and similar post-treatment ratings of the extent of actual use. Thirty-one of the clients' specific problems were classified by the researchers as personal problems, thirteen as marital, thirty-six as interpersonal, and thirteen as situational. For each of the fourteen strategies and for each phase, comparisons between planned and actual strategy use were made for these problem classifications.

Thus, for each of the fourteen strategies and in each of the three phases of treatment there was an n of 31 comparisons between extent of planned vs. subsequent strategy use in the personal problem area, and 13, 36, and 13 comparisons, respectively, in the problem areas of marital, interpersonal and situational. The mean difference between extent of planned versus subsequent use of a strategy during a given phase of treatment in a problem area were analyzed by t-tests for related measures (Bruning and Kintz, 1968). The error term (denominator) in the t-test was based on the difference between the ratings of planned and actual strategy use with a client for a specific problem. Instances where the mean differences between planned and subsequent strategy use for a given problem area in a given phase were not significant ($p > .05$), were considered as "hits," signifying correspondence between planned and actual strategy use. Lack of correspondence between planned and actual strategy use, "misses," were differences that were statistically significant ($p \leq .05$).

Results

The correspondence between planned and actual strategy use was determined through analyses of the exact probabilities of the ratio of hits (correspondences, as determined by t-tests) to the total number of hits and misses, using the cumulative binomial distribution test with equal p and q probabilities (.50).

Table 1 about here

Table 1 presents a list of the fourteen strategies and their mean use (1 - 4 scale), the proportion of hits obtained for each strategy across its twelve different instances of

ratings (4 problem areas x 3 phases), and the exact probability of obtaining such proportion. A low binomial probability value signifies a high proportion of hits; that is, many non-significant t-tests among the twelve comparions between planned and subsequent use of each strategy. Using $p = .073$ as the cut off point, Table 1 indicates that the extent of actual use of seven of the fourteen strategies corresponded to their anticipated use.

Is counselors' ability to forecast accurately the extent of use of an intervention strategy related to the relative frequency with which the strategy was used? If a mean ratings of 2.00 or above is taken to indicate relatively frequent use, then examination of the mean ratings of actual use of the strategies in Table 1 does not suggest such a relationship. Among the seven strategies with no correspondence there are four strategies with relatively frequent use, as there are two strategies that were used infrequently among the seven strategies with high correspondence.

Findings relating to the correspondence between planned and subsequent use of intervention across all fourteen strategies are presented in Table 2 for each problem area across the three phases, for each phase across the four problem areas, and for each problem area within each phase of treatment. As for the analysis by strategy,

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Table 2 about here

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correspondence was determined by the exact probabilities (using the cumulative binomial distribution test) of the proportion of hits (non-significant t-tests) among the individual comparisons within a given category. As the table indicates, two problem areas — personal and situational — had higher proportions of hits than expected by chance ($p < .05$), suggesting that counselors are more likely to pursue their planned interventions when dealing with personal or situational client problems as compared with interpersonal and marital problems.

As expected, a significant degree of correspondence between planned and subsequent use of strategies was found for the initial phase of treatment. However, the anticipated deterioration in extent of correspondence along the length of treatment did not prevail. Although correspondence in the middle phase was not significant, and less than in the initial phase, the correspondence in the third phase was high and statistically significant. As the analyses of correspondence by problem area and by phase also indicate, the proportion of correspondence in the marital and interpersonal problems areas was the highest in the last phase and significantly so for interpersonal problems, suggesting an interaction in the effect on correspondence between problem area and phase of treatment.

Discussion

Treatment planning is being increasingly advocated as an important component of systematic and informed practice. Although the clinical value of planning does not only depend on, and may transcend the extent to which plans are actually followed, knowledge of the extent of, and the conditions under which counselors' interventions correspond to their plans can be informing to treatment in general and the process of planning in particular. Thus the present study investigated the extent of correspondence between planned and subsequent use of interventions as moderated by the type of strategy, the problem addressed, and the phase of treatment.

While the results pointed to an appreciable degree of correspondence between counselors pre-treatment plans for use of interventions and their estimates of subsequent use, the extent of correspondence was not uniform across strategies, client problems, or phases of treatment. Of the fourteen interventive strategies that were investigated the use of seven corresponded to that which was planned. Whether counselors adhere to their plans to use a strategy did not seem to be related either to their ratings of the extent of

the strategy's actual use or to the substantive nature of the strategy. Relatively infrequently used strategies such as "behavior shaping" and "connecting clients with resources" evidenced high correspondence, as did frequently used strategies such as "exploration", "enhancing client awareness" and "evaluation of alternatives". Likewise, frequently used strategies such as "support" and "responsive communication" evidenced low correspondence, as did infrequently used strategies such as "role playing" or "modeling". Nor did the theoretical underpinnings and origin of strategies seem to differentiate the extent of correspondence. Strategies of either behavioral or dynamic orientation were as likely to be adhered to as not. On the other hand, the type of client problems in relation to which strategies were employed, and the phase of treatment, were more potent moderators of extent of correspondence.

The larger extent of correspondence found for the initial phase of treatment as compared with the middle phase may reflect the realities of informed and responsive treatment. Departures from an initially formulated treatment plan may occur because of refinement in the diagnostic formulations that were arrived at during the initial phase or in response to feedback from the client and his/her reactions to treatment. Hence, the low correspondence found for the middle phase of treatment may reflect necessary adjustments which counselors make in their intervention plans (Lorion, 1978).

The greater correspondence found for the initial as compared with the middle phase may also indicate the relative invariance, and hence greater predictability of the interventive repertoire used by counselors in the initial phase of treatment, particularly with clients with personal or situational problems. A similar interpretation can be advanced regarding the high correspondence that was found in the last phase of treatment. The last phase of treatment is usually the phase in which treatment effects are evaluated and termination and follow-up are planned for (e.g. Cormier and Cormier, 1979, Gottman and Leiblum, 1974). Although the activities engaged in that phase differ from those of the initial phase, both phases are relatively non-complex, short, and comprise of a relatively

high proportion of interventive behaviors that are enacted irrespective of the client's problem. The middle phase, in distinction, usually embodies the bulk of the change effort, in complexity as well as in duration. Not only is the agenda to be dealt with during this phase formidable, it is likely also that the available tools (knowledge) are not as well developed as tools for the initial and final phases of treatment.

The latter point may bear also on the findings of differential correspondence between planned and subsequent use of strategies according to problem area, where least correspondence was found for interpersonal and marital problems. It is readily observable that most of the research literature, developed theories, and the courses offered in counselor training programs focus on the individual client as the common unit of analysis and are oriented toward behavior change in individuals. It is likely therefore, that because counselors possess less theoretical knowledge and skills to deal with problems of interpersonal relationships, their treatment plans with regard to clients with such problems are more vulnerable to change.

That the counselors participating in the study may have been less well equiped to deal with complex interpersonal problems, in spite of their experience in a family oriented agency, is suggested by the nature of the interventive concepts which they used. Only few if any of the fourteen strategies which they described as exhaustive of their intervention repertoire have a unit more complex than the individual as their immediate referent. The hypothesis of inadequate conceptual tools for proper planning of change activities with interpersonal relations' problems requires, of course, further study. Future studies might pursue such interpretation by assessing independently and relating to correspondence counselors' knowledge of interventive concepts regarding a range of client units and problem complexity; as well as, as an additional variable bearing on this issue, investigate the degree of counselors' confidence in their knowledge and in their treatment planning projections.

Conclusion

The study addressed an area that had received little prior stystematic study—the extent to which counselors' plans to use a variety of intervention techniques correspond to their subsequent reports of the techniques that they have actually used. The intent was to throw some light on the desirability of engaging in systematic treatment planning activities as a guide to treatment. Within such intent, the assessment of correspondence through counselors' own subjective ratings of strategy use is more appropriate than using independent ratings of actual strategy use. For if, using the same definitions, counselors did not perceive themselves to have used strategies which they planned to originally, then the question of the utility of their planning activities comes into sharper focus than had such findings been based on correspondence assessed by independent observers. In the latter instance the issue of comparability of the observers ratings to the counselors' would have been paramount.

The results of the study and their suggested interpretation underscore the delicate balance between, and the reciprocal relations of availability of diagnostically differentiated and behaviorally specific interventive formulations on the one hand, and the ability of practitioners to engage in systematic treatment planning on the other (Rosen and Proctor, 1981). Not only will treatment planning be enhanced by the availability of practice relevant theoretical knowledge, to the extent that it is based on valid diagnostic premises such knowledge will also enhance the correspondence between the treatment plan and its actual execution.

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Table 1

Intervention Strategies and Their Mean Use in Descending Order by Proportion of Hits and Its Probability, Across Phases and Problems

Strategy	$\bar{X}$*	Proportion of Hits	P
Structuring	2.33	1.00	.0002
Evaluation of Alternatives	2.38	.92	.003
Behavior Shaping	1.76	.92	.003
Enhancing Client Awareness	2.55	.92	.003
Exploration	2.76	.83	.019
Ventilation	2.37	.75	.073
Connecting Clients with Resources	1.15	.75	.073
Interpretation	2.24	.66	.193
Enhancing Communication	2.41	.66	.193
Modeling 1.45	.58	.387	
Self Monitoring	1.10	.58	.387
Support and Reassurance	2.65	.58	.387
Responsive Communication	2.61	.50	.612
Role Playing	1.07	.50	.612

*Use of Strategy scale ranging from 1 "not all" to 4, "very much."

Table 2

Proportion of Hits By Treatment Phase and Problem Area, Across All 14 Strategies

	Treatment Phase			
Problem Area	I	II	III	Across Phases
Personal	.857*	.642	.857*	.785***
Marital	.642	.642	.714	.666
Interpersonal	.571	.642	.785*	.666
Situational	1.00*	.571	.785*	.785***
Across Problems	.767**	.625	.785**	

* $p < .05$, Cumulative binomial distribution test, for n = 14 (strategies) and $p = q = .50$.

** $p < .05$, Cumulative binomial distribution test, n = 42 (strategies X phases).

*** $p < .05$, Cumulative binomial distribution test, n = 56 (strategies X problem areas).