

## Efficacy of Brief Telephone Psychotherapy with Callers to a Suicide Hotline

WAYNE K. RHEE, PhD, MICHAEL MERBAUM, PhD, MICHAEL J. STRUBE, PhD,  
AND SUSAN M. SELF, LCSW

The efficacy of two types of therapy conducted exclusively over the telephone was studied. Clients ( $N = 55$ ) were recruited from a pool of callers to a suicide hotline and were randomly assigned to a waiting list control (WC) or Solution Focused Brief Therapy (SFBT) or Common Factors Therapy (CFT). It was hypothesized that improvements would be significantly higher in the two therapy conditions compared to the waitlist control and SFBT would be significantly more efficacious than CFT. Results confirmed that improvement was significantly higher in the two treatment conditions compared to the waitlist control, but no difference in improvement was found between SFBT and CFT. The implications of these findings for suicide hotlines are discussed.

Within the past decade, suicide hotlines have proliferated throughout the United States as a community effort to prevent and decrease the incidence of suicide (suicidehotlines.com, 2004). Indeed, according to a recent National Institute of Mental Health (NIMH) suicide facts report, "suicide was the 3rd leading cause of death among young people 15 to 24 years of age, following unintentional injuries and homicide" (2003). Typically, suicide hotlines are manned by lay volunteers and professional service workers who rely almost exclu-

sively on the telephone as the vehicle for persuading callers to consider other options than suicide. When suicide callers have chosen not to carry out their threats they are frequently referred to therapists or agencies that provide services to deal with the intense emotional distress callers to these programs often experience. Given the positive relationship that is likely to have been established between caller and hotline agency, a possible alternative to outside referral is to offer in-house brief psychotherapeutic assistance through the agency's telephone services. This study was therefore designed to investigate whether (1) brief psychotherapy conducted over the telephone has empirical support as a useful treatment strategy; and whether (2) brief telephone psychotherapy might be an empirically supported option to propose to suicide hotline callers if the first proposition is supported.

In contemporary psychotherapeutic practice (Reese, Conoley, & Brossart, 2002), the use of the telephone as a medium for psychotherapy is now more common and is reinforced by the demographic reality that telephones are available almost everywhere and within reach to a wide range of socioeco-

---

WAYNE RHEE, MICHAEL MERBAUM, and MICHAEL STRUBE are with Washington University in St. Louis, and SUSAN SELF is with Life Crisis Services in St. Louis.

This study was originally submitted by the first author as a dissertation in partial fulfillment of the Ph.D. at Washington University. Michael Merbaum and Michael Strube were co-chairs. We wish to thank Lee Judy of Life Crisis Services for his encouragement and support for this project.

Address correspondence to Michael Merbaum, PhD, Washington University, Department of Psychology, Psychology Building, Campus Box 1125, St. Louis, MO 63130-4899; E-mail: mmerbaum@wustl.edu.

nomic groups. In addition, the telephone has so radically collapsed geographic distance that people are accustomed to expressing emotion, sharing intimacies, and describing important personal events naturally and spontaneously during telephone conversations. Most discussions of the use of the telephone in the delivery of clinical services are reports about uncontrolled case studies or theoretical accounts based on personal therapeutic experience (Cooperman & Schafer, 1983; Flynn, Taylor, & Pollard, 1992; Haas, Benedict, & Kobos, 1996; Hines, 1994; Kaplan, 1997; Mermelstein & Holland, 1991). Among the existing research studies offering telephone therapy to patients, only four stand out because of their carefully designed methodology. Swinson, Fergus, Cox, and Wickwire (1995) conducted a telephone outcome study of 42 individuals having a diagnosis of agoraphobia with panic disorder. They were assigned to either behavior therapy by telephone or a waitlist control condition before receiving treatment. This was followed by eight 1-hour sessions of telephone therapy. These sessions involved the discussion of exposure therapy principles, hierarchy construction, homework tasks, and daily recording. Results indicated that patients in treatment showed significant improvement in the reduction of anxiety symptoms. McNamee, O'Sullivan, Lelliot, and Marks (1989) also studied telephone treatment of agoraphobia with panic disorder. Patients were assigned to exposure or relaxation treatment. Patients received self-help materials by mail, and then received ten telephone sessions lasting 12 minutes each over a period of 12 weeks. Of the patients who reached a 32-week follow-up evaluation, the patients in the exposure treatment group showed significant improvement whereas patients in the relaxation group did not. Mohr and colleagues (2000) offered telephone therapy to 32 multiple sclerosis patients who were diagnosed as substantially depressed. Participants were randomly assigned to an 8-week Cognitive Behavior Therapy (CBT) intervention or "the usual care through the patient's health maintenance organization." Their data indicated

that the CBT intervention was significantly more effective in reducing depressive symptoms than the "usual care" group. Finally, in a comprehensively designed effectiveness study, clients regarded telephone counseling as helpful and satisfactory, they reported a strong bond with their counselor, and successful outcomes were related to longer counselor contact time (Reese et al., 2002).

In the present study clients were invited by a hotline staff therapist to consider joining a telephone psychotherapy program sponsored by the agency. Once clients chose to participate in the research therapy program they were randomly assigned to one of three treatment conditions: Solution Focused Brief Therapy (SFBT), Common Factors Therapy (CFT), or a Waitlist Control (WC). The two treatment conditions, SFBT and CFT, were chosen as treatment variables because the agency had active training programs in these two approaches. All clients complained of a wide range of painful emotional and interpersonal concerns that seemed to approximate the experiences reported by a general clinic population.

We predicted two outcomes:

1. Clients in the therapy condition (SFBT and CFT) would show significantly better outcomes after treatment (decreased levels of distress) than clients in the WC condition.
2. Clients in the SFBT condition would show significantly better outcome after treatment than clients in the CFT condition. It was assumed that the SFBT condition not only contained common factor components but also included additional therapeutic ingredients that would lead to a more potent therapeutic experience than the CFT alone.

## METHOD

### *Participants*

Telephone therapy clients were drawn from a pool of callers at a telephone crisis

hotline. Before being offered telephone therapy, all callers to the crisis hotline were assessed by a crisis worker for suicide risk and indication for police or psychiatric intervention. Callers with medium or high risk for suicide were given appropriate intervention and referrals, and were not eligible to participate in the study.

Callers were identified as being candidates to participate in the study only if they met the following screening criteria: (a) the caller was currently not in therapy; (b) the caller was currently at no or low risk for suicide; (c) there were no indications for psychiatric referral (due to severe impairment of functioning or psychotic symptoms), hospitalization, or police intervention; and (d) the caller expressed interest in beginning psychotherapy. Callers who met all criteria were informed by the hotline crisis worker about various alternative options of available help, including mental health agencies, private therapists, support groups, and the telephone therapy program at the hotline. The crisis worker explained the purpose, procedures, risks, and benefits of the telephone therapy program and outcome research study. All telephone therapy and hotline services were offered free of charge. If the candidate chose not to participate in the study, appropriate referrals for other treatment were offered.

If brief psychotherapy conducted over the telephone was selected by the client and if he or she decided to participate in the study, the crisis worker scheduled an appointment for a telephone intake assessment. At that time, all information about the study was reviewed and an oral statement of informed consent was read to the client and confirmed. At this juncture clients were randomly assigned to one of the three groups (i.e., SFBT, CFT, or WC). Eighty-five clients participated in the study, and 55 clients completed pre- and post-therapy assessment batteries.

#### *Therapists*

Therapy was conducted by 14 therapists (9 women and 5 men). Nine of the therapists had Bachelors degrees and were en-

rolled in an MSW program; the remaining five therapists had completed their MSW degrees in Social Work. The mean age of the therapists was 31.9 years.

Before beginning clinical work with clients at the hotline, therapists completed a lengthy and comprehensive training program. This training included supportive psychotherapy and hotline crisis counseling. By the time they began clinical contacts with clients in this study, all therapists had at least 3 months of intervention experience on the telephone with the crisis hotline. Training components included role-playing challenging scenarios with experienced supervisors and actual monitoring of their behavior while talking with distressed clients on the telephone. Throughout the study all therapists received ongoing supervision and evaluation for their clinical contacts with clients. In addition to their regular training at the hotline, each therapist in this study received extensive manual-based training and supervision in SFBT and CFT from the hotline professional staff.

#### *Procedure*

In an effort to adhere to the exclusive telephone delivery system, all assessment and treatment contacts were carried out by telephone only. There were no face-to-face contacts with clients. Both modes of psychotherapy were carried out in a standardized manner, according to manuals and articles describing that approach's theoretical views, strategies, and therapeutic techniques. Each therapist was trained in both modalities, so that both types of psychotherapy were performed by the same group of therapists. Careful standardization of treatments using manual-specified criteria was used to promote fidelity to each therapeutic orientation and more readily allow inferences to be drawn about each therapy's specific effects.

Clients in the treatment conditions completed a pre-therapy interview with a therapist in the study who was not the client's assigned therapist. This therapist served as an evaluator. Following this assessment, clients

were called by their assigned therapist to begin therapy. The therapist then called the client at a prescheduled time each week for a telephone therapy session. Each session lasted between 45 and 60 minutes. Both treatments were open-ended, having no predetermined limit on the number of sessions. Clients randomly assigned to the wait-list control were contacted and informed that they would have to wait until a therapist was available. Due to the newness of the brief psychotherapy project in the agency, the number of therapists who were trained in the program was limited. However, because training in brief psychotherapy was ongoing in the agency, it was anticipated that the wait-list control group would have access to therapists if they chose to enter the brief psychotherapy program after the wait-list period had expired. Wait-list control participants were told they had access to the hot-line if the need arose.

In each of the two treatment groups the protocol required the following for scheduled telephone sessions. If the therapist called and there was no answer, the therapist called back after a few minutes. If the client missed the session, the therapist called a couple of times during the week to reschedule the next appointment. After any missed session, if there was no contact with the client after three to four messages had been left, the client's file was closed and the client was considered a dropout from the study.

## MEASURES

Clients in each condition completed the pre-therapy assessment and post-therapy assessment over the telephone. The assessments were performed by an independent evaluator who was blind to the clients' placement in either experimental treatment and control groups. The independent evaluator was a crisis worker or therapist who had no contact with the client other than as a pre- and post-therapy evaluator. A pre-therapy interview was conducted with clients in all three conditions. This interview included an oral statement of informed consent, collec-

tion of demographic information, and a battery of assessment measures. The demographic information collected included the client's age, gender, race, marital status, occupation, and any disability.

Clients in the waiting list condition completed the post-waiting list battery again at the end of the 6-week waiting period. Clients in both of the therapy conditions completed the battery again at the termination of therapy.

### *Assessment Battery*

The pre- and post-assessment batteries included four scales which were selected as measures for outcome assessment: the Beck Depression Inventory (BDI; Beck, 1978); the Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983); the Brief Psychiatric Rating Scale (BPRS; Overall & Borham, 1962), and the Satisfaction with Life Scale (SLS; Diener, Emmons, Larsen, & Griffin, 1985). As an added measure, a Visual Analogue Scale (VAS) asked clients to visualize and then report their current level of depression on a scale from 0 to 100.

All therapists completed the BPRS immediately following the first therapy session. This therapist rating was repeated as soon as possible after therapy was terminated. These ratings constituted the therapist's appraisal of pre- and post-client progress. In addition, the post-therapy battery also included a measure of the client's satisfaction with the therapist. The Rating of Therapist Scale was composed of 13 items that measured degree of satisfaction with the therapist and perceived traits of the therapist. Specific items are described in the results section.

## TREATMENTS

### *Solution Focused Brief Therapy*

Training in SFBT included a month-long workshop that involved didactic presentation of theory, observation of demonstration role-plays, practice of techniques in small

groups, supervision by experienced practitioners, and evaluation of skills acquired. The training program was conducted by two senior staff members trained in SFBT and who were actively practicing this therapeutic intervention. Training in theory and technique was based on a training manual (Walter & Peller, 1992) and other theoretical papers (e.g., Berg, 1994; Berg & de Shazer, 1993). After the training workshop, therapists received ongoing supervision and evaluation by a senior staff therapist at the hotline who had had extensive training and experience in SFBT.

The therapist working in this model attempted to help the client quickly identify a concrete goal. The therapist helped the client specify this goal in the form of observable, quantifiable behaviors and in the process establish a productive collaborative relationship. The therapist then used a wide variety of questions to help the client focus on these specific, short-term goals, and achieve the desired behaviors. For instance, the therapist might help the client identify and replicate exceptions to problems, that is, situations where the problem does not occur. The therapist might also use scaling questions to identify and focus on small degrees of behavioral change. The SFBT is characterized by optimism, an appreciation of the clients' competence to manage their lives and a future, goal-oriented self-enhancement process.

#### *Common Factors Therapy*

Training in CFT included a month-long workshop that involved didactic presentation of theory, experiential participation and practice, and ongoing supervision and evaluation. Training was drawn from theoretical papers describing a set of common factors in psychotherapy (e.g., Arkowitz, 1992; Grencavage & Norcross, 1990). Training also conformed to a manual by Merbaum (1995) patterned after Arkowitz (1992) to articulate common factors techniques and therapists behaviors that should be exercised or avoided. Role plays and experiential exercises that stressed therapeutic skills based on common factors were incorporated. Some of these fac-

tors include expressing empathy for the client, being accepting of the client, and being genuine toward the client. Additional emphases of the common factors orientation include developing a therapeutic alliance, encouraging affective expression, and creating positive expectations.

#### *Waitlist Control Condition*

Clients randomly assigned to the WC condition were placed on a 6-week waiting list. After the initial assessment, they were told that they would begin therapy when an opening became available. They were reminded that they were still welcome to call the crisis hotline anytime if the need arose or if they had any questions. The assessment batteries were completed pre-waiting list and post-waiting list. The waiting list assessment batteries were nearly identical to those administered in the therapy conditions. Unlike the treatment conditions, the waiting list assessments did not include the Brief Psychiatric Rating Scale, which is a measure of client symptoms to be completed by the therapist before and after treatment. After 6 weeks all control group clients received the post-waiting-list assessment to evaluate their emotional and quality of life psychological status. At this time, as a vital part of the research program, the assessors conducting the post-waiting-list assessment offered to all control clients access to telephone therapy on an eclectic orientation. This therapy was not restricted to manualized procedures, and may have involved elements of both SFBT and CFT.

## **RESULTS**

#### *Description of Sample*

The total sample of 85 clients included 32 males (38%) and 53 females (62%). The ages of the clients ranged between younger than 25 ( $n = 13$ , 15%), 25 to 35 ( $n = 10$ , 12%), 36 to 50 ( $n = 21$ , 25%), and older than 50 ( $n = 6$ , 7%). The marital status of clients included married ( $n = 7$ , 8%); separated, di-

vorced, or widowed ( $n = 17$ , 20%); or single ( $n = 25$ , 30%). Clients were Caucasian ( $n = 74$ , 87%) and African American ( $n = 11$ , 13%). A number of clients reported having some type of disability ( $n = 16$ , 19%) including complaints of Renard's disease, severe asthma, and degenerative arthritis. Clients most often reported being unemployed ( $n = 23$ , 27%) or holding low income occupations (e.g., dishwasher, telemarketer, food service;  $n = 22$ , 26%).

#### *Dropout Analyses*

A loglinear analysis was conducted to detect whether therapy dropout rates varied as a function of condition. This analysis indicated the presence of a significant interaction between client dropout rates and condition,  $\chi^2(2, n = 85) = 8.09, p = .02$ . The dropout rate was highest in the SFBT condition (50% dropout rate), compared to the CFT condition (37% dropout rate) and the WC condition (15% dropout rate). Focused contrasts were used to further specify the nature of this interaction. A comparison of the SFBT condition to the WC condition indicated a significantly greater dropout rate in the SFBT condition,  $\chi^2(1, n = 58) = 8.04, p < .005$ ; however, a comparison of the CFT condition to the WC condition indicated no significant difference in dropout rates,  $\chi^2(1, n = 53) = 3.28, p > .05$ . Closer inspection of the dropout data indicated that among dropouts in the SFBT condition, 11 of 16 left before having had any contact with their assigned therapist. In the CFT condition, 7 of 10 also left before receiving any treatment. In other words, the percentages of patients leaving their conditions after having been exposed to some level of the treatment (or control) was comparable across conditions: SFBT (16%), CFT (11%), and WC (15%).

#### *Outcome Analyses*

The hypotheses were tested using hierarchical multiple regression analysis. Measures of clinical significance were calculated in terms of effect size as represented by par-

tial eta square ( $p\eta^2$ ). Partial eta square represents an estimate of the proportion of the variance in a measure that can be explained by a particular variable independent of other predictors in the model. The square root of partial eta square represents the difference in success rates between the treatment conditions (Rosenthal & Rubin, 1982).

The regression analysis used two dummy variables, D1 and D2, to represent the three therapy conditions. The SFBT condition was coded 1 on D1 and 0 on D2. The CFT condition was coded 0 on D1 and 1 on D2. The WC condition was coded 0 on both D1 and D2, and was thus the reference group against which the two treatment groups were compared. The independent variables were entered in the following order in separate steps: Pretest score, Condition (D1 and D2), and Pretest by Condition interaction. Effects were tested for significance at the step at which they were entered. The posttest score was the outcome measure.

It was predicted that clients in both therapy conditions (SFBT and CFT) would show significantly more improvement than clients in the waiting list control condition. This hypothesis was generally well supported. Table 1 shows each outcome measure and the overall condition  $F$  test, the  $t$  test for each therapy condition (D1 and D2), and the means and standard deviations for each condition. For 10 out of the 14 client-reported outcome measures, there were significant differences between therapy conditions and the waiting list control condition.

Significant interactions involving D1 (SFBT) were found on two measures, Brief Symptom Inventory (BSI) and Somatization, both  $ts(47) \geq 2.54, ps \leq .05, p\eta^2 \geq .07$ . Interactions involving D2 (CFT) were found on six measures (BSI, Phobias, Hostility, Anxiety, Somatization, and VAS) all  $ts(47) \geq 2.34, ps \leq .05, p\eta^2 \geq .08$ . These interactions showed the same general pattern, illustrated well by results for the BSI. For that measure, pretest and posttest were significantly related for clients in the WC condition ( $B = 0.88, SE = 0.21, p < .05$ ). In the therapy conditions, clients gains from treatment were unrelated to

**TABLE 1**  
*Outcome Measures*

Measure and Condition	Pre		Post		Overall Condition		D1/D2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	<i>t</i>	<i>p</i>
Beck Depression Inventory					1.02	.37		
SFBT (D1)	30.85	3.05	16.92	2.87			-1.42	.16
CFT (D2)	23.38	2.06	19.13	2.52			-0.68	.50
WC	29.48	1.33	23.00	3.25				
Beck VAS					4.37	.02		
SFBT (D1)	72.69	6.52	47.69	7.57			-2.79	<.01
CFT (D2)	58.75	5.87	44.69	4.78			-1.95	.06
WC	74.29	2.99	67.62	3.94				
Brief Symptom Inventory (BSI)					8.02	<.01		
SFBT (D1)	84.69	10.79	42.69	9.13			-3.62	<.01
CFT (D2)	84.94	7.03	51.19	7.41			-3.22	<.01
WC	100.00	6.62	89.33	8.02				
Psychoticism					7.50	<.01		
SFBT (D1)	9.46	1.00	4.62	1.11			-3.27	<.01
CFT (D2)	8.81	0.95	4.88	0.90			-3.32	<.01
WC	11.38	0.87	9.24	0.82				
Paranoia					2.90	.07		
SFBT (D1)	9.77	1.22	4.92	1.17			-2.40	.02
CFT (D2)	9.13	1.16	6.69	1.03			-1.27	.21
WC	11.67	1.14	9.33	1.16				
Phobias					1.95	.15		
SFBT (D1)	5.31	1.17	2.54	1.03			-1.56	.12
CFT (D2)	4.44	0.76	2.13	0.58			-1.75	.09
WC	5.67	1.06	4.57	1.00				
Hostility					4.96	<.01		
SFBT (D1)	6.15	1.38	2.92	0.70			-2.57	.01
CFT (D2)	7.44	0.95	3.63	0.67			-2.75	.01
WC	8.86	1.03	7.14	1.11				
Anxiety					8.56	<.01		
SFBT (D1)	8.54	1.34	2.62	0.84			-3.83	<.01
CFT (D2)	11.13	1.26	5.25	1.21			-3.01	<.01
WC	11.29	1.29	9.76	1.24				
Depression					7.69	<.01		
SFBT (D1)	14.62	1.91	9.31	2.00			-3.54	<.01
CFT (D2)	13.44	1.23	10.69	1.33			-3.02	<.01
WC	15.38	1.07	16.24	0.93				
Interpersonal Sensitivity					4.94	<.01		
SFBT (D1)	9.38	1.16	4.92	1.30			-2.58	<.01
CFT (D2)	8.81	1.12	5.13	1.01			-2.68	<.01
WC	8.95	0.85	8.86	0.89				
Obsession-Compulsion					8.12	<.01		
SFBT (D1)	10.08	1.77	5.54	1.14			-3.63	<.01
CFT (D2)	10.44	1.48	6.88	1.23			-3.24	<.01
WC	14.43	1.03	12.57	1.06				

(continued)

**TABLE 1**  
*Outcome Measures*

Measure and Condition	Pre		Post		Overall Condition		D1/D2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	<i>t</i>	<i>p</i>
Somatization					6.70	<.01		
SFBT (D1)	5.54	1.56	1.62	0.66			-3.35	<.01
CFT (D2)	6.06	1.25	3.06	0.76			-2.69	<.01
WC	5.95	0.98	6.29	1.29				
Miscellaneous Items					5.52	<.01		
SFBT (D1)	7.00	1.10	4.08	1.00			-2.43	0.02
CFT (D2)	7.69	0.99	3.81	0.73			-3.08	<.01
WC	8.43	0.76	7.52	0.94				
Satisfaction with Life Scale					2.57	.09		
SFBT (D1)	10.54	1.42	15.08	1.77			2.09	0.04
CFT (D2)	12.81	1.00	13.56	1.43			1.71	0.09
WC	9.14	0.67	10.29	0.90				

*Note.* SFBT = Solution Focused Brief Therapy, CFT = Common Factors Therapy, WC = Waiting List Control Condition.

pretest levels (SFBT:  $B = 0.11$ ,  $SE = 0.21$ ,  $p > .05$ ; CFT:  $B = -0.42$ ,  $SE = 0.25$ ,  $p > .05$ ). Thus, generally speaking, treatment worked best for the most distressed clients and the type of treatment did not seem to matter.

Outcomes from the therapist's perspective were measured by the Brief Psychiatric Rating Scale. Eight items were selected for analysis because they seemed most relevant to the presenting complaints (i.e., anxiety, emotional withdrawal, guilt feelings, depressive mood, hostility, distractibility, uncooperativeness, blunted affect). Paired sample  $t$  tests were conducted to compare the therapist's ratings of clients on these items before and after therapy. Six of the eight items showed significant effects, indicating that therapists rated clients as being significantly improved after therapy on most items, all  $t_s(24) \geq 2.19$ ,  $ps \leq .05$ . Only emotional withdrawal and blunted affect failed to change significantly, although both were in the expected direction ( $ps < .15$ ). No differences between therapy conditions were found.

#### *Ratings of Therapists*

A series of  $t$  tests comparing the two therapy conditions were conducted for each

of the items on the Rating of Therapist Scale. None of these tests detected significant differences between the two conditions, all  $t_s(27) \leq 1.23$ ,  $ps > .05$ ,  $\eta^2 \leq .05$ ; however, the mean ratings on these items indicated that clients as a whole generally rated their therapy as beneficial and their therapists as being understanding, helpful, and possessing positive qualities. In the SFBT condition, the means and standard deviations on each of the items were as follows. Item 1 (How well does your therapist seem to understand what you are feeling and thinking?) was rated on a scale ranging from 1 (*positive understanding*) to 4 (*negative understanding*),  $M = 2.50$ ,  $SD = 0.90$ . Item 2 (How helpful do you feel your therapist is?) was rated on scale ranging from 1 (*completely helpful*) to 6 (*not helpful at all*),  $M = 3.17$ ,  $SD = 1.64$ . Item 3 (At the present time, how much do you feel you have benefited from this counseling or psychotherapy?) was rated on a scale ranging from 1 (*considerably improved*) to 7 (*considerably worse*),  $M = 2.17$ ,  $SD = 1.19$ . Item 4 (My therapist:) was rated separately on ten therapist quality items such as attentiveness, warmth, acceptance, cheerfulness, involvement, interest, and so forth. Each of these qualities was rated on a 4-point scale from 0 (*not having the quality*),



to 4 (*very much having the quality*). Responses to the qualities were combined to obtain a mean score,  $M = 2.10$ ,  $SD = .72$ . In the CFT condition, the means and standard deviations on each of the items were as follows: Item 1,  $M = 2.35$ ,  $SD = 0.70$ ; Item 2,  $M = 2.59$ ,  $SD = 0.87$ ; Item 3,  $M = 2.41$ ,  $SD = 0.80$ ; Item 4,  $M = 2.34$ ,  $SD = 0.56$ .

## DISCUSSION

The unique feature of the current investigation is the entire delivery of psychotherapeutic interventions over the telephone without any face-to-face contact between therapist and client. This is the first telephone psychotherapy study dealing with a general clinical sample, in which the methodology was designed with rigorous experimental controls, such as random assignment of participants to conditions and the use of treatment manuals to enhance fidelity and uniformity of treatment. In discussing the specific results, a number of significant questions are salient to the quality of outcomes obtained in this study.

The first crucial issue is whether there was any detectable harm done to the clients who participated in this psychotherapy experiment. Based on reports by clients to their therapists during the process of therapy and satisfaction with treatment ratings post therapy, almost no dissatisfaction with the treatment was expressed. For example, to the post therapy question "At the present time, how much do you feel you have benefited from this counseling or psychotherapy" only one client out of 33 indicated that they became slightly worse and one indicated no change in outcome status. Although threat for suicide was not a selection criterion for inclusion in the brief telephone psychotherapy project, all participants offered the service had indicated suicide ideation during their initial contact with the Life Crisis Hotline. Given that all clients entered therapy after reporting suicide promptings, the lack of harm following the treatment experience is noteworthy. The results are in agreement with the effectiveness study by Reese et al.

(2002), who also found that clients regarded their telephone treatment as quite beneficial.

The second question is whether any good was achieved in this therapeutic context, that is, was therapy helpful? The hypotheses tested in this study dealt with very basic questions of therapeutic efficacy. How well did the treatment work and how does the efficacy of one type of therapy compare with another? The first hypothesis that clients receiving treatment would have significantly better outcomes (less distress) than clients receiving no treatment in the waiting list control condition was generally supported. On data derived from the client's perspective, results indicated that for 10 of the 14 outcome measures, clients in therapy reported better outcomes than clients on the waiting list. Effect sizes for these ten measures ranged between partial eta squared of .10 and .18 (equivalent to  $r$  between .32 and .42).

From the therapist's perspective of change, the evaluation of therapeutic outcome included one dependent measure, the BPRS. Paired sample  $t$  tests conducted on the most relevant clinical variables indicated that therapists rated their clients as being significantly improved on most scale items. The sets of ratings from the clients (BSI) and therapists (BPRS) were generally consistent with each other. Among the therapist ratings, significant effects were found on the following BPRS items: anxiety, depression, hostility, distractibility, uncooperativeness, and guilt. Among the client ratings, significant effects were found on the following BSI measures: anxiety, depression, hostility, obsession compulsion, interpersonal sensitivity, somatization, psychoticism, and miscellaneous BSI items and VAS. Thus, in many of the same areas of distress both clients and therapists perceived improvements after clients received therapy.

Additional regression analyses indicated that significant interactions between treatment condition and pretest were found on six of the posttest client self-report measures: BSI post-score, phobias, hostility, anxiety, somatization, and VAS depression. For these variables, clients who were on the waiting list had outcomes directly related to their

pretest score levels, which would be expected. This pre-post relation was reduced or eliminated for clients receiving CFT or SFBT. These data suggest that telephone delivered therapy was particularly effective for clients who start out with high pretest levels of distress.

One of the main hypotheses predicted that clients receiving SFBT would have significantly better outcomes (greater reduction of distress) than clients receiving CFT. There was no support for this hypothesis. From the client's perspective, results indicated that for the 14 outcome measures, none showed any significant effects of differential efficacy between the two treatment groups. Clients benefited from therapy, but were equivalently well off in either SFBT or CFT when delivered over the telephone. Indeed, from the therapist's perspective as well, BPRS items indicated no significant differences between SFBT and CFT. These data, when conjoined with work by Mishara and Daigle (1997; Daigle & Mishara, 1995) are consistent in suggesting that compassionate listening and empathy are significantly related to reductions in depression and suicidal urgency. Thus, during the acute phase of suicide promptings based on the samples researched by Mishara and Daigle, and after urgency for suicide has relatively subsided, based on our sample, the indications are that telephone interventions can provide substantial practical value in reducing emotional distress in both groups.

Of special importance is that if gains were achieved, did the therapeutic value to clients reach a level of clinical significance that might encourage the use of telephone delivery for clients from general or special populations? Two questions arise when considering statistical significance (Kendall, Marrs-Garcia, Nath, & Sheldrick, 1999): (a) Is the amount of the improvement from treatment meaningful; and (b) Are treated individuals different from normals after treatment? Rather than using the latter method of comparison between clients and normals, we considered clinical significance from the point of view of meaningful change within the individual. The magnitude of the treatment effect sizes

found in this study was typically very meaningful clinically, with partial eta square between .10 and .18. This is equivalent to Cohen's *d* of between .67 and .93, and indicates that typical improvement was on the order of three-fourths of a standard deviation.

An intriguing finding in this study was the apparently high drop out rates for the various treatment groups. Ladouceur, Gosselin, Laberge, and Blaszczyński (2001) review and critically examine the various interpretations and guidelines used in determining drop out rates in clinical research. In our data, the definition of a drop-out fell into two categories: those who dropped out before treatment ever began and those who had at least one session and then left the study. Most of our drop-out participants in both treatment groups (11 clients in the SFBT condition and 7 clients in the CFT condition) decided to forego treatment before they had had any therapeutic contact whatsoever. For those four participants in the SFBT condition who dropped out after having had therapists contact, three had only one session and one had three sessions. In the CFT condition, one left therapy after one session and two following two sessions. In these instances it is assumed that the clients may have been disappointed with the therapeutic service or might even have experienced substantial symptom reduction during this brief therapeutic contact. It is hard to tell. Similarly, the reasons for refusal in the much larger group that never even spoke with their therapists are also difficult to identify. Some may have decided that the telephone was not an ideal environment for sharing problems, others may have felt a declining need for any treatment at all, and some may have experienced undetermined practical problems in setting time aside for therapeutic contact. Once participants were engaged in therapy, however, most regarded the experience as personally worthwhile.

Finally, these empirical data suggest that brief psychotherapy over the telephone is a viable service to offer prospective clients particularly when face-to-face options are either unavailable or inconvenient. Of special

significance is that the therapists in this study appeared to perform effectively and expressed confidence in their ability to be helpful in this telephone context. Prior to the study they had had training and experience in handling serious emotional issues over the telephone, so they were generally well informed and self-assured about using the telephone for therapeutic purposes. Furthermore, these therapists did not perceive any need to have face-to-face contact with their clients as agency policy unconditionally forbade any direct social or therapeutic involvements. Under this mind set, therapists could function freely and spontaneously over the telephone without believing their clients were denied the privilege of a face-to-face interaction. Given these unique therapeutic resources, suicide hotline services may have a special advantage in offering brief therapies over the telephone especially for clients who may be in great need for immediate intervention. Obtaining speedy and competent referral treatment in crisis situations is not easy, especially because many hotline clients may be without eligible insurance coverage to qualify for treatment in other professional venues. Insofar as professional competence is concerned, a value added feature to suicide and crisis hotline services is that hotline therapists, whose training has focused on intervention and managing suicide issues, are likely to be especially empathic to the life and death

issues these caller clients are powerfully experiencing.

Although these data suggest the helpfulness of brief telephone psychotherapy, a number of questions remain unanswered. For example, assuming there is equal opportunity for on-site agency training in the delivery of psychotherapeutic conversation over the telephone, would professionally trained therapists perform more successfully than less educated persons trained in hotline skills? In the current study, our therapists had varying levels of psychologically relevant professional experience, though all had had prior exposure to therapeutic interventions. Importantly, however, these data indicated no significant differences in outcome efficacy between the more or less experienced research therapists. Whether psychotherapeutic training could be effectively extended to persons with less formal educational degrees, as for example hotline volunteers without post high school degrees, cannot be determined by the results of this study. A testing of this research question is undoubtedly of considerable practical value though ethical considerations raise daunting issues to be addressed in a study of this sort. What the current data do suggest is that experienced professionals, given careful and focused training, are able to deliver effective brief psychotherapy over the telephone.

## REFERENCES

- ARKOWITZ, H. (1992). A common factors therapy for depression. In M. Goldfried & J. Norcross (Eds.), *Handbook of psychotherapy integration* (pp. 403–432). New York: Basic Books.
- BECK, A. T. (1978). *Depression inventory*. Philadelphia: Center for Cognitive Therapy.
- BERG, I. K. (1994). Solution focused brief therapy with substance abusers. In A. Washton (Ed.), *Psychotherapy and substance abuse*. New York: Guilford Press.
- BERG, I. K., & DE SHAZER, S. (1993). Making numbers talk: Language in therapy. In S. Friedman (Ed.), *From problem to possibility*. New York: Guilford Press.
- COOPERMAN, S., & SCHAFER, D. W. (1983). Hypnotherapy over the telephone. *American Journal of Hypnosis*, 25, 277–279.
- DAIGLE, M. S., & MISHARA, B. L. (1995). Intervention styles with suicidal callers at two suicide prevention centers. *Suicide & Life-Threatening Behavior*, 25, 261–275.
- DEROGATIS, L. R., & MELISARATOS, N. (1983). The Brief Symptom Inventory: An introductory report. *Psychological Medicine*, 13, 596–605.
- DIENER, E., EMMONS, R. A., LARSEN, R. J., & GRIFFIN, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- FLYNN, T. M., TAYLOR, P., & POLLARD, C. A. (1992). Use of mobile phones in the behavioral treatment of driving phobias. *Journal of Behavior Therapy and Experimental Psychiatry*, 23, 299–302.

- GRENCAGE, L. M., & NORCROSS, J. C. (1990). Where are the commonalities among the therapeutic common factors. *Professional psychology: Research and Practice*, 21, 372-378.
- HAAS, L. J., BENEDICT, J. G., & KOBOS, J. C. (1996). Psychotherapy by telephone, video-phone, and computer videoconferencing: Risks and benefits for psychologists and consumers. *Professional Psychology: Research and Practice*, 27, 154-160.
- HINES, M. (1994). Using the telephone in family therapy. *Journal of Marital and Family Therapy*, 20, 175-184.
- KAPLAN, E. H. (1997). Telepsychotherapy. *Journal of Psychotherapy Research and Practice*, 6, 227-237.
- KENDALL, P. C., MARRS-GARCIA, A., NATH, S. R., & SHELDRIK, R. C. (1999). Normative comparisons for the evaluation of clinical significance. *Journal of Consulting and Clinical Psychology*, 67, 285-299.
- LADOUCEUR, R., GOSSELIN, P., LABERGE, M., & BLASZCZNSKI, A. (2001). Dropouts in clinical research: Do results reported reflect clinical reality? *The Behavior Therapist*, 24, 44-46.
- MCMAMEE, G., O'SULLIVAN, G., LELLIOTT, P., & MARKS, I. (1989). Telephone guided treatment for housebound agoraphobics with panic disorder: Exposure vs. relaxation. *Behavior Therapy*, 20, 491-497.
- MERBAUM, M. (1995). *Common factors therapy training manual*. Unpublished manuscript.
- MERMELSTEIN, H. T., & HOLLAND, J. C. (1991). Psychotherapy by telephone: A therapeutic tool for cancer patients. *Psychosomatics*, 32, 407-412.
- MISHARA, B. L., & DAIGLE, M. S. (1997). Effects of different telephone intervention styles with suicidal callers at two suicide prevention centers: An empirical investigation. *American Journal of Community Psychology*, 25, 861-885.
- MOHR, D. C., LIKOSKY, W., BERTAGNOLLI, A., GOODKIN, D. E., VAN DER WENDE, J., DWYER, P., ET AL. (2000). Telephone-administered cognitive-behavioral therapy for the treatment of depressive symptoms in multiple sclerosis. *Journal of Consulting and Clinical Psychology*, 68, 356-361.
- NATIONAL INSTITUTE OF MENTAL HEALTH. (2003). Suicide facts. NIH Publication No. 03-4594, revised April 2003.
- OVERALL, J. E., & GORHAM, D. R. (1962). The Brief Psychiatric Rating Scale. *Psychological Reports*, 10, 799-812.
- REESE, R. J., CONOLEY, C. W., & BROSART, D. F. (2002). Effectiveness of telephone counseling: A field-based investigation. *Journal of Counseling Psychology*, 48, 233-242.
- ROSENTHAL, R., & RUBIN, D. B. (1982). A simple, general purpose display of magnitude of experimental effect. *Journal of Educational Psychology*, 74, 166-169.
- SUICIDEHOTLINES.COM. (2004). Retrieved from <http://www.Suicidehotlines.com>
- SWINSON, R. P., FERGUS, K. D., COX, B. J., & WICKWIRE, K. (1995). Efficacy of telephone-administered behavioral therapy for panic disorder with agoraphobia. *Behavior Research and Therapy*, 33, 465-469.
- WALTER, J. L., & PELLER, J. E. (1992). *Becoming solution-focused in brief therapy*. New York: Brunner-Mazel.

Manuscript Received: April 11, 2004

Revision Accepted: August 30, 2004