TREATMENT OF SUICIDE IDEATORS: A PROBLEM-SOLVING APPROACH

by

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(ABSTRACT)

The present study compares two types of treatments
designed to reduce suicidal ideations: social
problem-solving therapy and supportive therapy. Social
problem-solving therapy is based on research indicating that
suicidal individuals have deficits in problem-solving skills
in general and in interpersonal problem-solving skills, in
particular. Supportive therapy was chosen as a comparative
treatment to control for nonspecific effects of
problem-solving therapy and to provide an ethical alternative
treatment.

The results indicated that problem-solving therapy was
more effective than supportive therapy for reducing
depression and for improving interpersonal problem-solving
self-efficacy at posttest. At 3 month follow-up there
continued to be differences between the groups in
depression, but not in problem-solving self-efficacy. In
addition, at follow-up problem-solving therapy was more
effective than supportive therapy for reducing hopelessness
and loneliness. Although there were no differences between

the groups on severity of suicidal ideations, within group
analyses revealed that problem-solving therapy significantly
reduced severity of ideations over time.

The findings suggest that social problem-solving therapy
is a more effective treatment than supportive therapy for
reducing depression, hopelessness, and loneliness of suicidal
individuals. This may be due to social problem-solving
deficits being a key problem for suicidal individuals.
Although there are several limitations to the study, such as
small sample sizes, it provides an example of treatment
research with suicidal individuals. Similar studies would
be useful to further evaluate empirically-based treatments
for suicidal individuals.

ACKNOWLEDGEMENTS

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INTRODUCTION

Suicide is the second leading cause of death in persons 15 to 24 years of age (Rosenberg, Smith, Davidson, & Conn, 1987). Over the last 30 years the suicide rate for adolescents has increased substantially while during the same time period the suicide rate for adults has decreased. The rate of adolescent suicide is approximately 15 per 100,000 and continues to rise (Fingerhut & Kleinman, 1988).

The rate of adolescent suicide attempts has been estimated to be 50-100 times the rate of suicide completions (American Association of Suicidology, 1988). The result is at least 250,000 adolescents attempt suicide per year in the United States. Studies of high school students reporting their own attempts found the suicide attempt rate to be 8-9% (Harkavy-Friedman, Asnis, Boeck, & DiFiore, 1987; Smith & Crawford, 1986). Studies of college students reporting their own suicide attempts or threats found the rate to be 4-8% when students were asked about "serious" threats or attempts (Wellman & Wellman, 1988) and 10-15% when students were asked about threats or attempts in general (Cantor, 1976; Mishara, 1982; Mishara, Baker, & Mishara, 1976).

Although many suicide attempters do not complete suicide there is a large overlap in the populations. Psychological

autopsies of adolescent suicide completers showed that 40%
had made at least one previous suicide attempt (Shafii,
Carrigan, Whittinghill, & Derrick, 1985). In addition,
prospective studies have found that a significant number of
individuals who attempt suicide also complete suicide
(Goldacre & Hawton, 1985; Motto, 1984; Otto, 1972).

The rate of suicide ideation among college students has
been estimated to be 9-11% when students were asked to
indicate whether they had experienced "serious" suicidal
thoughts (Wellman & Wellman, 1988). It has been estimated to
be as high as 35% in studies that do not specify severity
(Cantor, 1976; Minear & Brush, 1980-81). Although many more
individuals experience ideation than those who attempt
suicide, it is considered a precursor to a large proportion
of suicide attempts. Brent and his colleagues (Brent, Kalas,
Edelbrock, Costello, Dulcan, & Conover, 1986) examined
children and adolescents referred for psychiatric treatment
and found suicidal ideation to be on a continuum with suicide
intent and suicidal behavior. They found that individuals
who presented with suicidal behaviors or severe thoughts also
tended to have less severe suicidal behaviors and/or
thoughts. There was also was a tendency for most psychiatric
symptoms to increase with severity of suicidal ideation
(e.g., depression, alcohol abuse, overanxious disorder).
Brent (1987) found in a chart review of child and adolescent

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attempters that medical lethality of an attempt was associated with level of suicide intent.

Given the rate of adolescent suicide and suicidal behavior, there is a clear need to develop treatments for suicidal individuals. Although there has been extensive research on the epidemiological and psychological predictors of suicidal behavior, there has been little controlled research on treatment. The lack of controlled treatment studies may be due to the ethical challenge of creating a suitable control group, the risk involved in treating suicidal clients, and/or the lack of a theoretical framework for understanding suicidal behavior.

One empirically-based psychological model of suicidal behavior was proposed by Clum and his colleagues. They synthesized the research on the relationships between a number of psychological variables and suicidality into a diathesis-stress model (Clum, Patsiokas, & Luscomb, 1979; Schotte & Clum, 1987). They proposed that the key deficit in suicidal individuals is poor interpersonal problem-solving skills. They suggested that individuals with poor interpersonal problem-solving skills under high levels of stress lack the coping skills to generate and implement effective solutions to relieve stress. Failing to find effective solutions these individuals become hopeless and, in turn, suicidal.

There is some evidence to support the model. The diathesis-stress model predicts an interaction between stress and poor problem-solving skills--that is, individuals with poor problem-solving skills and high levels of stress will be at greater risk for suicidal behavior than individuals experiencing only stress or only poor interpersonal problem-solving skills. Schotte and Clum (1982) found this result in a study of college students. They found that students with poor social problem-solving skills under high levels of stress were more suicidal than students who had either low levels of stress and/or better problem-solving skills.

The diathesis-stress model provides a framework from which to design treatments for suicidal individuals. It implies that by improving social problem-solving skills hopelessness and suicidality will be reduced. The present study evaluates the effectiveness of social problem-solving therapy for reducing the hopelessness and severity of suicidal ideations for suicidal individuals. A description of the study will follow a review of the research on which it was based, and a review of other treatments that have been evaluated.

Predictors of Suicidal Behavior

Life Stress. There is strong support for the hypothesis that suicidal individuals experience more life

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stress at the time of a suicidal crisis than nonsuicidal individuals experience generally. Six months prior to a suicide attempt suicide ideators reported experiencing four times as many negative stressors than normals and one and a half times as many as depressives prior to onset (Paykel, Prusoff, & Myers, 1975). In addition, the frequency of negative events increased sharply one month prior to a suicidal crisis for suicidal individuals. Cochrane and Robertson (1975) found that this relationship existed regardless of age, sex, and social class variables. Motto, Heilbron and Juster (1985) found that personally relevant stressors were related to future suicide completion for hospitalized depressive and suicidal patients. Gispert, Wheeler, Marsh, and Davis (1985) found that for suicidal adolescents suicidal risk was significantly correlated with current stress, whereas depression was correlated with lifelong as well as current stress. Schotte and Clum (1982) found that suicide intent and stress were highly correlated for a sample of college students (Schotte & Clum, 1982). The studies present consistent evidence that negative life stress is related to suicidal behavior. The research suggests that negative life stress is especially severe immediately prior to a suicide attempt.

Problem-Solving Deficits. Many individuals experience high levels of stress, but very few engage in suicidal

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behavior or ideations. Thus, there must be other contributing factors that increase suicidal risk. One risk factor that has received a large amount of attention is the cognitive deficits of suicidal individuals. Research in this area began in the 1960's. Both cognitive rigidity and dichotomous thinking were found to be reliably related to suicidal behavior. Suicidal individuals were found to score more rigidly on the Rokeach Map Test and the California F Scale (Levenson & Neuringer, 1971; Neuringer, 1964). They performed less well on the Unusual Uses and Word Association Tests (Levenson, 1972), and the Alternate Uses Tests (Patsiokas, Clum, Luscomb, 1979).

Clum and his colleagues investigated whether these types of cognitive deficits extended to interpersonal problems. Schotte and Clum (1982) asked individuals to complete the Means End Problem-Solving procedure (Platt & Spivack, 1975), which asks individuals to generate solutions to a number of interpersonal problems. They found that subjects with higher levels of suicide intent were poorer problem-solvers. Schotte and Clum (1987) examined the type of problem-solving deficits suicidal individuals displayed. They found that when asked to solve an interpersonal problem suicidal patients compared to nonsuicidal psychiatric controls (1) generated fewer alternatives; (2) listed more negative consequences to the alternatives; and, (3) employed

fewer of the alternatives in designing a solution to the problem. These studies suggest that suicidal individuals have specific types of deficits in interpersonal problem-solving skills.

Depression and Hopelessness. Another major risk factor for suicidal behavior is clinical depression. Suicidal ideations is one possible criteria for a diagnosis of major depression (American Psychiatric Association, 1987; Diagnostic Statistical Manual-III Revised). Approximately 10-15% of individuals diagnosed with a major affective disorder will commit suicide (Miles, 1977). In order to better predict the risk of suicidal behavior of depressives another factor must be considered, and that is hopelessness. Hopelessness has been found to be consistently related to suicidal risk, and a better predictor of suicide intent than depression in both suicide attempters and suicide ideators (Ellis & Ratliff, 1986; Minkoff, Bergman, Beck, & Beck, 1973; Schotte & Clum, 1982; Wetzel, 1976). Motto (1977) found that suicidal ideation and intent increased with higher levels of hopelessness. Hopelessness was also found to be the best predictor of future suicide in a prospective study of psychiatric inpatients treated for suicide ideation (Beck, Steer, Kovacs, & Garrison, 1985). Thus, hopelessness is an important variable to consider when evaluating suicidal risk.

Treatment of Suicidal Individuals

Crisis Centers. Crisis centers have been one form of suicide prevention instituted in both Britain and the United States. Crisis intervention is based on the assumption that social support during a crisis will prevent suicidal behavior (e.g., Shneidman & Farberow, 1965; Varah, 1977). There have been a few studies evaluating the effectiveness of crisis centers by comparing the suicide rate in towns in which crisis centers are established to towns without crisis centers. Bagley (1968) found that towns with crisis centers experienced a reduction in suicide rate, compared to matched towns which experienced an increase within the same time period. Jennings, Barraclough, and Moss (1978) attempted to replicate these findings with an expanded sample and found only small, nonsignificant differences in suicide rate. Weiner (1969) and Lester (1974) also found little difference in suicide rate between towns with and without crisis centers.

These findings indicate that crisis centers do not reduce the suicide rate. Evidence from an additional study, however, suggests that crisis centers may impact the individuals most likely to use them. Miller, Coombs, Leeper, and Barton (1984) evaluated the suicide rate of age-race-sex cohorts and found that the suicide rate for young, white females decreased in areas that established a center,

compared to a control group consisting of areas that had no center or had previously had a center. This cohort is one that would be more likely to use crisis centers. More research evaluating cohorts will be useful for evaluating the effectiveness of crisis centers for preventing suicide.

Outreach Approach. Another type of suicide prevention has been rigorous outreach following a suicide attempt. This approach is based on the assumption that social support following a suicidal crisis will prevent future suicidal behavior. A number of studies have evaluated the effectiveness of these programs. Different types of outreach have been utilized across the studies including telephone outreach, home visits, and contact by mail. The results overall have shown that although outreach has an impact on social functioning it has little impact on suicidal behavior (Chowdury, Hicks, Kreitman, 1973; Gibbons, Butler, Urwin, and Gibbons, 1978; Hawton, Bancroft, Catalan, Kingston, Stedeford, & Welch, 1981). Only Welu (1977) reported a lower rate of suicide attempts in the outreach group. One controlled nonrandom study evaluated the effects of outreach on adolescent suicide attempters (Deykin, Hsieh, Joshi, & McNamara, 1986). The program involved assigning social workers to adolescents seen in the emergency room to help them with follow-up appointments and provide support. The program also involved education in the schools and community.

Results indicated increased compliance with medical recommendations and a reduction in emergency room admissions due to adolescent suicide attempts. Similar to the findings with adults, though, there was no effect on repeat suicide attempts.

In sum, neither the crisis centers nor the outreach programs have been impactful on suicidal behavior. On the plus side, the outreach programs have been effective for improving social functioning of suicidal individuals. One explanation for the lack of findings with regard to suicidal behavior is the low base rate of the behavior. Another possible explanation is that both crisis centers and outreach programs are based on the untested assumption that social support decreases suicidal behavior. Since there is mixed evidence regarding the relationship between perceived social isolation (lack of social support) and suicidality (see review, Spirito, Brown, Overholser, & Fritz, 1989) it is possible that social support does not prevent suicidal behavior.

Behavioral Interventions. An alternative type of intervention, based on the assumption that suicidal individuals lack specific interpersonal skills is behavioral therapy. Liberman and Eckman (1981) compared a broad-based behavioral treatment to an insight-oriented treatment. The behavioral treatment consisted of social skills training,

anxiety management training, and family contracting. These
investigators found that the behavioral treatment was
superior at posttreatment and two year follow-up for reducing
severity of suicidal ideations, depression, and improving
social adjustment. There were no differences in suicide
attempt rate at the two year follow-up. Again, the lack of
impact on suicide attempts may be a result of the low base
rate. In fact, few of the subjects repeated an attempt. This
study offers an alternative way of measuring impact of
treatment, and that is to evaluate severity of suicidal
ideations. Although it is difficult to evaluate which of the
components of the behavioral treatment was most effective,
the results suggest that behavior therapy may be a useful
treatment for reducing suicidal ideations.

Social Problem-Solving Therapy. The diathesis-stress
model suggests that social problem-solving therapy is a
viable treatment for suicidal individuals. The research
consistently supports the relationship between
problem-solving deficits and suicidal behavior. Thus, social
problem-solving therapy may be more effective for treating
suicidal behavior because it is empirically-based. One study
has previously evaluated the effectiveness of social
problem-solving therapy for treating suicidal individuals.

Patsiokas and Clum (1985) compared social
problem-solving therapy to cognitive restructuring therapy

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and supportive therapy for treating hospitalized suicidal patients. They found that social problem-solving therapy resulted in significantly larger improvements in problem-solving skill relative to the other two therapies, and significantly larger reductions in hopelessness, relative to the control group. All three treatments significantly reduced suicidal ideations. They did not measure suicide attempts. The lack of differences among the therapies in affecting suicidal ideations was attributed to the low pretreatment level of suicidal ideations. The low level of ideations may have been due to the patients having been admitted following a suicide attempt which is a time that ideations tend to decrease. Thus, further studies with individuals with more severe suicidal ideations are necessary to evaluate the effects of problem-solving therapy on suicidal ideations.

The present study examined the effects of problem-solving therapy on individuals with severe levels of suicidal ideations. Similar to Patsiokas and Clum (1985) the problem-solving therapy was based on D'Zurilla and Goldfried's (1971) model of interpersonal problem-solving. They proposed that interpersonal problem-solving could be conceptualized as five steps: (1) problem orientation: accepting that problem situations are a normal part of life and believing that one can solve one's own problems, (2)

problem definition: defining the problem in operational
terms, (3) generating alternative solutions to the problem,
(4) evaluating and selecting alternatives, and (5)
implementing and verifying the chosen alternative.
Problem-solving therapy consisted of didactic teaching,
practice, and feedback to train suicidal adolescents in these
five interpersonal problem-solving skills.

Problem-solving therapy was compared to supportive
therapy. Supportive therapy was chosen as a comparative
treatment to control for nonspecific effects of the
problem-solving therapy, such as treatment contact and group
cohesion. Supportive therapy in the present study differed
from that used in the Patsiokas and Clum (1985) study, in
that it included a didactic component teaching effective
communication and listening skills. This was added to
control for the directive component of the problem-solving
therapy. Supportive therapy was also chosen for ethical
reasons because of its theoretical and applied acceptance.
As mentioned previously, one alternative hypothesis about the
etiology of suicidal behavior is that it is related to social
isolation (Braucht, 1979; Lettieri, 1974; Nelson, Nielson,
and Checketts, 1977). From an applied perspective,
supportive therapy is a valid comparison because of its
widespread use in the form of therapy in crisis centers and
outreach programs.

There were a number of predictions for the effects of each of these treatments. Based on previous research it was predicted that both problem-solving therapy and supportive therapy would reduce suicidal ideations to some extent. Because problem-solving therapy is based on an empirically-derived theory of suicidal behavior, it was predicted that individuals in problem-solving therapy would experience greater reductions in suicidal ideations than those in supportive therapy. The improvements were expected to be maintained at 3 months follow-up. It was also predicted that problem-solving therapy would be more effective for reducing depression, hopelessness, and stress; and for improving social problem-solving ability and self-efficacy.

METHOD

Experimental Design

A 2 (Treatment: Problem-Solving, Supportive) X 3
(Trials: Pre, Post, and Follow-Up) design was used. Subjects
were assigned either to the problem-solving group or to the
supportive group. Treatment groups were formed when a
sufficient number of subjects qualified (2 to 5 subjects).

Selection Criteria

Subjects were drawn primarily from the Introductory
Psychology pool and higher level psychology classes. There
were approximately 1900 students registered for introductory
psychology each of two years; the study was conducted over
two academic years. Introductory psychology subjects
received credit for participation in assessment, but not for
participation in treatment.

Subjects were required to be 18 to 24 years of age and
currently experiencing suicidal ideations. They had to have
experienced at least one suicidal thought in the two weeks
prior to assessment and have obtained a score of 11 or above
on the Modified Scale for Suicidal Ideation (MSSI; Miller,
Norman, Bishop, & Dow, 1986). This score was chosen because
it was previously found to be associated with suicidality for
psychiatric patients admitted for hospitalization (personal
communication, I. W. Miller, July 31, 1987). The requirement

of one suicidal thought in the last two weeks guaranteed that they were currently ideating. Exclusion criteria included concomitant diagnoses of schizophrenia, organic brain syndrome, or substance abuse. Subjects were not excluded for taking psychotropic medications as long as they were on a therapeutic dose of their medication. A therapeutic dose constituted two weeks or longer on a physician prescribed medication.

Subjects

Approximately 60 individuals over two academic years made initial contact inquiring about participation in the study. Thirty-eight subjects qualified for treatment. Ten subjects elected not to participate due to various reasons, including interference with time for studying, crisis resolution, unhappy with group format, and uncomfortable discussing feelings. Seven subjects dropped out after one or more sessions for similar reasons as described for those who chose not to participate. Two subjects were removed from the analyses because of problems following treatment protocol (substance abuse and inappropriate contact with treatment staff member) and one subject was referred for individual therapy because a group was not available. The subjects who chose not to participate or dropped out of treatment did not differ from those remaining in the treatment on demographic, clinical, or pretreatment dependent variables with the

exception of duration of suicidal thoughts. Subjects who participated experienced suicidal thoughts for a shorter duration than those who did not participate, $t(33) = 2.79$, $p < .01$.

Subject Characteristics

A total of 18 subjects completed the study. Table 1 presents the subject characteristics for each group.

Problem-solving therapy subjects. Eight females and one male ranging in age from 18 to 20 years of age ($M = 18.78$, $SD = .83$) participated in the problem-solving therapy group. Eight of the subjects were Caucasian and one was Afro-American. All were university undergraduate students and all were single.

With respect to clinical variables related to suicidal behavior, all subjects had experienced at least one suicidal ideation in the past two weeks (range = .5 - 7 per week, $M = 2.56$, $SD = 2.61$). The duration of suicidal ideations ranged from 1/10th of a year to 13 years ($M = 3.42$, $SD = 3.87$). The number of previous suicide attempts ranged from zero to two. Two subjects were on psychotropic medications. One subject simultaneously participated in individual therapy. The subject was in individual therapy prior to beginning the study.

Supportive therapy subjects. Six females and three males ranging in age from 18 to 22 years of age ($M =$

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19.56, $\underline{SD}$ = 1.74) participated in the supportive therapy group. All subjects were Caucasian. All were university undergraduate students and all were single.

With respect to clinical variables related to suicidal behavior, all subjects had experienced at least one suicidal ideation in the past two weeks (range = .5 - 7 per week, $\underline{M}$ = 2.94, $\underline{SD}$ = 2.55). The duration of suicidal ideations ranged from 1/10th of a year to 9 years ($\underline{M}$ = 3.10, $\underline{SD}$ = 2.91). The number of previous suicide attempts ranged from zero to four. None of the subjects were on psychotropic medications. Two subjects simultaneously participated in individual therapy, one of whom was previously in individual therapy and the other of whom was referred for individual therapy because of a suicide attempt during the course of the study. There were no significant differences between the treatment groups on demographic or clinical variables.

Assessment

Subjects were recruited with advertisements posted in the psychology building. In order to protect confidentiality subjects were asked to call the Psychological Services Center, or leave their first name and phone number on a folded slip of paper at a designated office in the psychology building.

Potential subjects were contacted by phone and the study was described to them. If they chose to participate an

appointment was made for an evaluation. If they chose not to participate they received a referral to an appropriate source. At the pretest session they signed a consent form (Appendix A) and a no-suicide contract prior to completing the assessment instruments. The assessment was conducted by one of three trained interviewers (two senior undergraduates; one clinical psychology graduate student). The posttest session was conducted within one week after completion of treatment and the follow-up session was completed three months after the end of treatment. All interviewers were blind to treatment condition.

Dependent Measures

Parasuicide Ideation Interview (Appendix B). This interview-based questionnaire was used to record subjects' retrospective reports of suicidal thoughts and attempts in the two weeks prior to assessment. Subjects were also asked about the history of their suicidal thoughts and behaviors.

Modified Scale for Suicidal Ideations (MSSI; Miller et al., 1986; Appendix C). This interview-based, 18-item clinical research tool was used to assess severity of suicidal ideations. It is a modified form of the Scale for Suicidal Ideations developed by Beck, Kovacs, & Weissman (1979) to assess and quantify the degree of suicidal intent in samples of suicide ideators. Each item is scored from 0 to 3, with higher scores indicating more severe ideation.

Total Scores can range from 0 to 54. A score of 11 or above was found to be associated with suicidality in a psychiatric population (personal communication, I. W. Miller, 1987). The scale has high internal consistency (coefficient alpha = .94) and high interrater reliability (.5-1.0 intraclass correlation coefficient and .79 total sum correlation).

Beck Depression Inventory (BDI; Appendix D). This 21-item measure was used to examine cognitive, somatic, and behavioral dimensions of depression, with emphasis on the cognitive dimension (Beck, 1967). It has high internal consistency, with a split-half reliability coefficient of .86, and item-total correlations .31-.68. It has also been demonstrated to have high levels of concurrent and construct validity.

Zung Self-Rating Depression Scale (Appendix E). This 20-item scale developed by Zung (1965) was used to assess the affective, somatic, psychological, and physiological symptoms typical of depression. This scale has demonstrated high concurrent and construct validity.

Hopelessness Scale (HS; Appendix F). This is a 20-item scale assessing the degree to which an individual's cognitive schemas are dominated by negative expectations about the future (Beck, Weissman, Lester, & Trexler, 1974). The scale has high internal consistency (.93) and relatively high levels of concurrent and construct validity.

Modified Means-Ends Problem-Solving Procedure (Modified
MEPS; Appendix G). This instrument is designed to assess
interpersonal problem-solving deficits. Subjects were asked
to report a recent interpersonal problem. They were asked to
solve the problem by generating alternatives, evaluating
consequences in terms of positive and negative outcomes, and
writing a detailed solution. It is similar to the unmodified
MEPS (Platt & Spivack, 1975) which asks subjects to write
detailed solutions to a number of specified problems. The
Modified MEPS was scored by the number of alternatives
generated, the rating of the quality of each of the
alternatives, the number of positive and negative
consequences listed for each alternative (Schotte & Clum,
1987), and the number of relevant means used in a detailed
solution of the problem (Platt & Spivack, 1975). The
unmodified MEPS has an interrater reliability estimate of .94
and a test-retest reliability over five weeks of .64.

Problem-Solving Inventory (PSI; Appendix H). The PSI
is a 35-item self-report measure of perceived efficacy in
solving interpersonal problems (Heppner, 1986). Respondents
were asked to agree or disagree on 6-point scales with a
series of statements describing their problem-solving skills.
Lower scores equalled higher self-efficacy. The inventory
was scored for a total score and three factor scores.
Heppner (1986) defined the first factor, problem-solving

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confidence, as a belief in one's ability to solve problems; the second factor, approach-avoidance style, as a tendency to approach or avoid problems; and the third factor, personal control, as believing one is in control of emotions and behaviors while solving problems. The inventory has high internal consistency for total score and for each of the three factors. The alpha coefficients are as follows: problem-solving confidence, .85; approach-avoidance, .84; personal control, .72; and total inventory, .90. The test-retest reliabilities over a two week period are also high with correlations ranging from .83 to .89. This measure has also been shown to have high concurrent and construct validity.

UCLA Loneliness Scale (Appendix I). This measure was utilized to assess perceived loneliness. It is a 20-item scale developed by Russell, Peplau, and Cutrona (1980) with internal consistency estimates of .91 to .94. Test-retest reliability estimate for the original scale over a 2 month period is .73. The revised scale (i.e., the one being used) correlates with the original scale, .91.

Self-Monitoring for Suicidal Ideation (Appendix J). Subjects recorded instances of suicidal thoughts that occurred daily. Self-monitoring began on the day of the first treatment session and ended on the day of the last treatment session.

Weekly Stressor Scale (STRESS; Appendix K). Subjects reported five current stressful events and rated them on 10-point scales ranging from not at all stressful to extremely stressful. Subjects completed the scale at the pretreatment session, each week of treatment and at the posttreatment assessment session.

Rating of Treatment Quality (Appendix L). Subjects rated the quality of the treatment they received on six 9-point scales. The subjects were asked: "how logical does this type of treatment seem to you?", " how confident are you that this treatment will be successful in reducing your suicidal thoughts", "how confident would you be in recommending this treatment to a friend?", "how important do you think it is that we make this treatment available to others who experience suicidal thoughts", "how successful do you believe this treatment would be in decreasing other problems like general anxiety, depression, etc.?", and "please rate the level of mastery of the treatment skills you believe you will obtain by the end of the last treatment session." Subjects completed the measure following the first, fifth, and tenth treatment sessions.

Therapist Evaluation (Appendix M). Subjects rated the therapist of the treatment group after the last treatment session on five 9-point scales. Subjects rated the therapist on scales of competency, likableness, understanding, warmth,

and comfortableness.

Posttreatment Feedback (Appendix N). Subjects were asked to write a paragraph on what they thought the treatment was about and what they learned from the treatment.

Treatment Conditions

Subjects who met selection criteria and chose to participate were assigned to a treatment group consisting of two to five members. Assignment was random when two groups were running simultaneously, otherwise subjects were assigned to the treatment group being offered. Treatment groups alternated with the first treatment randomly selected. Random assignment of subjects to treatment was at times impossible because of insufficient numbers of available subjects who met selection criteria. A treatment group would form when 2 - 5 members were available. Each treatment group consisted of ten sessions over a 5 - 7 week period. Each session was one and one-half hours long. The therapists were advanced clinical psychology graduate students supervised by a faculty member who is a licensed clinical psychologist. Three groups were conducted by a female therapist (1 problem-solving group and 2 supportive groups) and three groups were conducted by a male therapist (2 problem-solving groups and 1 supportive group).

Problem-Solving Therapy (Appendix O). The treatment package was adapted from D'Zurilla and Goldfried (1971) and

was used to treat suicidal individuals by Patsiokas and Clum (1985). The goal of treatment was for subjects to acquire skills to allow them to problem-solve effectively. The treatment involved teaching the subjects to use the five skills described by D'Zurilla and Goldfried (1971): problem orientation, problem definition, generation of alternatives, evaluation and selection of solutions, and implementation and verification of solutions. Each session consisted of didactic teaching, practice, and feedback. Each of the skills was taught sequentially over the course of treatment, with previous skills reviewed in each session. Skills were practiced on real-life problems, especially those related to suicidal thoughts.

Supportive Therapy (Appendix P). The treatment package consisted of empathic listening on the part of the therapist and facilitation of sharing of experiences within the group. In addition, the therapist taught active listening skills to the subjects and encouraged them to use these skills within and outside of the group. Each session consisted of a brief didactic component followed by discussion of problems surrounding suicidal thoughts, with the emphasis on honest communication, expression of feelings, and active listening.

Treatment Integrity

The problem-solving therapy differed from the supportive therapy in that it was more directive and

didactic, and taught problem-solving skills related to interpersonal problems precipitating suicidal thoughts. Supportive therapy had some didactic components teaching communication skills, but the emphasis was on sharing experiences with other group members. The therapies were similar in that they included group interaction and empathic listening from a trained therapist.

The integrity of the treatments was maintained in several ways. Therapists were trained to provide the problem-solving and supportive treatments. Training was conducted by providing three to four sessions initial sessions of role modeling, watching videotapes of each treatment, and practicing skills. Feedback was provided following the first three sessions, and supervision was conducted throughout treatment. Therapists were provided with session-by-session treatment outlines. During treatment therapists were provided with feedback and supervision. In addition, to evaluate for adherence to treatment protocol videotapes of the sessions were evaluated to examine whether randomly chosen segments could be identified as the correct treatment.

Treatment Rationales

Problem-Solving Therapy. The therapist presented the following rationale:

"The treatment will be conducted in a group setting in

which individuals with similar problems to yours will also be participating. There will be ten group sessions. The sessions are designed to help you understand how your suicidal thoughts developed, how you can deal with the thoughts, and how to reduce the frequency and intensity of the thoughts. We will look at suicide as a problem in problem-solving. You will learn better problem-solving skills and learn to apply the skills to stressful situations that are causing your suicidal thoughts. The problem-solving skills will be individualized to maximize your effectiveness in dealing with problem situations. We have found this technique to work effectively for treating individuals with suicidal thoughts."

Supportive Therapy. The therapist presented the following rationale:

"The treatment will be conducted in a group setting in which individuals with similar problems to yours will also be participating. There will be ten group sessions. The sessions are designed to help you by having you share your thoughts and feelings about problems associated with your suicidal thoughts. Sharing these thoughts and feelings in a supportive, nonthreatening environment will allow you to feel understood and listened to by others. You will also learn to trust others and feel less alone with your problem. This

type of therapy has been used effectively to treat individuals with suicidal thoughts."

RESULTS

Preliminary Analyses

Subject Expectancies and Therapist Variables. The
ratings for subjects' perceptions of treatment quality were
summed across the 6 items. There were no significant
differences between problem-solving and supportive groups for
ratings of the quality of the treatments after the first and
fifth treatment sessions. There were significant differences
between the groups after the final session. Subjects in the
problem-solving condition rated their treatment to be of
higher quality than did subjects in the supportive condition
(Ms = 8.2 vs. 7.1; $t(16)$ = 2.28, $p<.05$). Therapist
evaluations were also conducted after the final session. The
ratings were summed over the 5 items. The therapist was
rated more highly in the problem-solving condition, than in
the supportive condition (Ms = 8.7 vs. 7.8; $t(16)$ = 2.86,
$p<.05$).

There were three therapists conducting the
groups. An analysis of variance (ANOVA) indicated that there
were no significant differences among the therapist
evaluations of the three therapists. Also, a multivariate
analysis of variance (MANOVA) indicated that were no
significant differences on dependent variables at
posttreatment or follow-up as a function of Therapist
Evaluation or Therapist Evaluation X Treatment Condition (see

Appendix Q).

Validity Check.   Taping of sessions was conducted in
order to evaluate adherence to protocol. The tape ratings
were conducted by having a rater independent of the study
listen or watch one 10 minute segment of a tape and indicate
the treatment from which it came. One or two tapes per small
treatment group were evaluated. The rater correctly
identified the treatment condition in all but one case; that
is, 8 out of 9 were correctly identified. This is
significantly better than chance, z = 2.43, p< .05.

A validity check was also conducted by having a blind
rater assess subjects' written posttreatment feedback. The
subjects had been asked to indicate what they thought the
treatment was about and what they learned from the treatment.
The results indicated that the rater identified correctly 16
out of 18 as the actual treatment. This is significantly
better than chance, z = 3.24, p< .001.

Pretreatment Analyses. Mean scores and standard
deviations are presented in Table 2.   T-tests were conducted
to examine pretreatment differences on dependent measures
between treatment groups. There were no pretreatment
differences between treatment conditions for measures of
weekly stress (STRESS), social problem-solving ability
variables (Modified MEPS), total problem-solving appraisal
score (PSI), and two of the problem-solving factors

(confidence and approach-avoidance), and loneliness (UCLA).
There were pretreatment differences on measures of severity
of suicidal ideations (MSSI, $t(16) = 2.13$, $p< .05$), personal
control (PSI factor, $t(16) = 3.06$, $p< .01$), depression (BDI,
$t(16) = 2.29$, $p< .05$; Zung, $t(16) = 2.30$, $p< .05$), and
hopelessness (HS, $t(16) = 3.60$, $p<.01$). Subjects in the
problem-solving group were more severely suicidal, perceived
less control in solving their problems, reported feeling more
depressed, and reported feeling more hopeless about the
future.

Treatment Effects

Mean scores on posttreatment and follow-up dependent
measures were submitted to analyses of covariance (ANCOVAs)
with pretreatment scores as covariates. Changes over the
course of treatment were examined by using within group
t-tests.

Posttreatment. Posttreatment assessment was conducted
one week following completion of treatment. Means and
standard deviations are presented in Table 2. ANCOVAs are
presented in Table 3. At posttreatment significant group
differences were found for BDI ($F(1,15) = 6.40$, $p<.05$), total
PSI score ($F(1,15) = 4.95$, $p<.05$), the confidence factor of
the PSI ($F(1,15) = 4.36$, $p=.05$), and the approach-avoidance
factor of the PSI ($F(1,15) = 4.60$, $p<.05$). A trend was found
for the Modified MEPS measure of number of relevant means

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generated ($F(1,15) = 4.05$, $p=.06$). At posttreatment subjects in the problem-solving group were less depressed, had higher problem-solving self-efficacy, were more confident about their ability to solve problems, more likely to approach problems, and generated marginally more solutions to an interpersonal problem, relative to subjects in the supportive group.

Within group t-tests were used to evaluate the changes from pre- to posttreatment for each treatment condition. The results are presented in Table 4. Because of the multiple comparisons, Bonferroni t-tests were conducted to control family-wise error rates for an alpha level of .05. As can be seen in Table 3, subjects in the problem-solving condition significantly improved from pre- to posttreatment on severity of suicidal ideations (MSSI), depression (BDI), hopelessness (HS), stress (STRESS), problem-solving self-efficacy (PSI), and perceived control over problem-solving (PSIPC). Subjects in the supportive therapy condition did not make significant improvements from pre- to posttreatment.

Three-Month Follow-up. The assessment instruments were readministered three months following treatment. As can be seen in Table 3, at follow-up there continued to be group differences in level of depression (BDI; $F(1,15) = 8.37$, $p<.01$), with individuals in the problem-solving group indicating lower levels of depression. There were also group

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differences on hopelessness (HS; $F(1,15)$ = 5.13, $p<.05$) and loneliness (UCLA; $F(1,15)$ = 11.66, $p<.01$). At follow-up subjects in the problem-solving group were less depressed, less hopeless and less lonely than those in the supportive group.

Within group t-tests were used to evaluate the changes from posttreatment to follow-up, and from pretreatment to follow-up (see Table 4). Bonferroni t-tests were used to control family-wise error rates for an alpha level of .05. There were no significant differences for either treatment group from posttreatment to three-month follow-up. As can be seen in Table 3, there were significant differences from pretreatment to follow-up within the problem-solving group. Subjects in the problem-solving condition significantly improved from pretreatment to follow-up on severity of suicidal ideations (MSSI), depression (BDI), hopelessness (HS), problem-solving self-efficacy (PSI), and loneliness (UCLA). Stress was not assessed at follow-up. Subjects in the supportive therapy condition did not make significant improvements from pretreatment to follow-up.

Correlational Analyses

Correlational analyses were used to examine whether posttreatment changes in problem-solving ability and self-efficacy were related to posttreatment and follow-up changes in the dependent variables. The analyses revealed

that changes in problem-solving ability (defined as the ability to use relevant means) at posttreatment were related to reductions in depression at posttreatment (BDI; r = .564, p<.05). Improvements in problem-solving self-efficacy (PSI total score) at posttreatment were significantly related to improvements at posttreatment in depression (BDI, r = .711, p=.001; ZUNG, r = .647, p<.01), and hopelessness (r = .614, p<.01), but not significantly related to changes in severity of suicidal ideations or stress. The relationship of posttreatment changes in problem-solving self-efficacy to changes at follow-up revealed significant correlations for severity of suicidal ideations (MSSI, r = .546, p<.05), depression (BDI, r = .722, p=.001; ZUNG, r = .647, p<.01), hopelessness (HS, r = .659, p<.01), and loneliness (UCLA, r = .562, p<.05).

Self-Monitoring of Suicidal Thoughts and Weekly Stress.

Subjects were asked to complete daily self-monitoring sheets indicating whether they had experienced a suicidal thought. Seven out of nine subjects in the problem-solving group completed the monitoring, and four out of nine in the supportive group completed the monitoring. The number of thoughts per week for each subject is presented in Table 5. In both groups there appears to be a steady decline of frequency of suicidal ideations from the second week of treatment to the fifth and final week of treatment. By the

final week of treatment subjects in both groups, with the exception of one in the supportive group, reported experiencing no suicidal thoughts.

The weekly stressor scale was completed each week of treatment and at the pretreatment and posttreatment assessment sessions. Three out of nine subjects in the problem-solving group and six out of the nine subjects in the supportive group completed the seven weekly stressor assessments. All subjects completed pre- and posttreatment measures and their data were presented previously. The score for the scale is an average of the stress ratings for five events. A maximum score would be 10. The mean stress scores for each subject completing the assessments is presented in Table 6. The stress scores for subjects in both groups appear to vacillate over the five weeks of treatment. For example, the fourth week appears to be a particularly stressful week for the subjects who completed the stressor scale.

Clinical Impact of Treatment

The ANCOVAs and within group t-tests indicated that problem-solving therapy produced significant changes over time and is superior to supportive therapy in its effects on a number of dependent variables. These analyses, however, do not evaluate whether these changes are clinically important.

Clinical improvement in the present study was defined

as 50% reduction in severity of suicidal ideations (MSSI),
50% reduction in depression (BDI), and 50% reduction in
hopelessness (HS) at follow-up. Subjects had to meet all
three criteria to be considered as significantly clinically
improved. Within the problem-solving group 8/9 subjects met
the criteria. Within the supportive therapy group 4/9
subjects met the criteria. Significantly more subjects in
the problem-solving group than the supportive group showed
clinical improvement according to the criteria (z = 2.04;
p<.05).

DISCUSSION

The present study was designed to evaluate the
effectiveness of social problem-solving therapy for treating
suicidal individuals. Supportive therapy served as a
comparative treatment. An attempt was made to equate both
therapies on quality of treatment and quality of therapists.
This was done by crossing therapists across treatment
conditions (with the exception of one small group) and by
taping sessions, giving feedback to therapists regarding
performance, and evaluating adherence to treatment protocol.
Despite these efforts, there were differences in the
perceived quality of treatment and quality of therapist
following the final treatment session. Subjects in the
problem-solving group rated the treatment and therapist
higher in quality than subjects in the supportive group.
This may be because the problem-solving therapy was of better
quality and the therapists in this condition acted more
comfortable, warm, likeable, and so on. Alternatively, this
may be because the subjects attributed more positive ratings,
retrospectively, as a result of experiencing more improvement
in the problem-solving group. This would account for the
differences in treatment quality ratings after the tenth
session (the final session), but not after the fifth session.
It would also account for the lack of differences in ratings

of therapists when both groups were combined. Thus, it is likely that the differences between the groups on perceptions of quality of treatment and quality of therapist reflect retrospective accounts of the experience in treatment. In addition, an analysis of the effect of the ratings of the therapist on the dependent measures indicated that this variable did not account for differences on any of the dependent measures.

The analyses of the treatment effects indicated that problem-solving therapy was superior to supportive therapy for reducing depression and improving problem-solving self-efficacy at posttreatment. There was a trend indicating that problem-solving therapy was also superior for improving the social problem-solving ability of using relevant means to solve a problem. At follow-up, problem-solving therapy continued to be superior for reducing depression, and in addition was better than supportive therapy for reducing hopelessness and loneliness. There were no longer differences in problem-solving self-efficacy or problem-solving ability at follow-up.

The correlational analyses revealed that changes in problem-solving self-efficacy at posttreatment were related to changes in depression and hopelessness at posttreatment; and to changes in severity of suicidal ideations, depression, hopelessness, and loneliness at follow-up. Changes in

problem-solving ability at posttreatment were only related to changes in depression at posttreatment. Thus, it appears that problem-solving self-efficacy may be a key mediator in the effects of problem-solving therapy on the psychological correlates of suicidal behavior.

The results for depression are consistent with the findings of other studies. Liberman and Eckman (1981) found that behavior therapy was superior to insight-oriented therapy for reducing depression of suicidal individuals up to two years. Nezu and his colleagues found problem-solving therapy to be effective for reducing depression in a number of populations including a clinically depressed, though not necessarily suicidal population (Nezu, 1986).

With respect to hopelessness, the results from the Patsiokas and Clum (1985) study are consistent with the present findings. They found that problem-solving therapy resulted in greater reductions in hopelessness of hospitalized suicidal individuals relative to a supportive therapy group. In the present study the greater reductions in hopelessness were found at follow-up, but not at posttest. This was due to individuals in the problem-solving group continuing to improve from post to follow-up while those in the supportive group remained the same. A similar pattern was found for loneliness. Further improvement from post to follow-up is an interesting finding. One interpretation is

that changes at posttest in other psychological variables (i.e., depression, problem-solving self-efficacy and ability) influenced later changes in hopelessness and loneliness. This is partially supported by the finding that posttreatment changes in problem-solving self-efficacy were significantly correlated with follow-up changes in depression, hopelessness, and loneliness. Further research on changes over time would be useful for examining this possibility. Congruent with this hypothesis, the diathesis-stress model predicts that improvements in problem-solving skills will reduce hopelessness.

Another prediction of the diathesis-stress model is that improving problem-solving skills will reduce severity of suicidal ideations. Although severity of suicidal ideations were reduced in the problem-solving group, they were also reduced in the supportive therapy group. Thus, there were no significant differences between the groups in their impact on suicidal ideations.

This finding is similar to that found by Patsiokas and Clum (1985). They found that both problem-solving therapy and supportive therapy significantly reduced suicidal ideations. They attributed the lack of differences between the groups to a low pretreatment rate of suicidal ideations. This explanation is not applicable to the present study because the selection criteria included a moderate to severe

level of suicidal ideations.

Another possible explanation for the lack of differences on this variable is that suicidal ideations are transitory and reduce over time with or without therapy. Due to the ethical difficulties with a no treatment control this hypothesis is difficult to evaluate. Related to this hypothesis, subjects reported anecdotedly that they experienced more ideations in times of stress. In the present study the results for stress indicated that it vacillated over the course of treatment, whereas ideations and other variables tended to decrease. Hence, the reduction of stress does not appear to easily explain the results.

A third possible explanation is that the problem-solving therapy was not potent enough in training problem-solving skills. The effect of problem-solving therapy on improving problem-solving skills was marginally superior to supportive therapy. This explanation would be more plausible if there had been no improvement in both groups, but as mentioned, the findings indicate improvement in both groups.

Thus, these results suggest that both problem-solving therapy and supportive therapy are effective for reducing severity of suicidal ideations. This renders the assumption that treatments specifically designed to treat problem-solving deficits may not be necessary for short-term reductions in suicidal ideations. Given the findings for

depression, hopelessness, and loneliness, however, there may
be long term effects on suicidal ideations that were not
assessed in the current study. In fact, at three month
follow-up the level of suicidal ideations for the supportive
group was beginning to return to baseline, whereas the
reduction was maintained in the problem-solving group.
Further research will be necessary to examine this
possibility.

One notable limitation to the study is the small sample
size. Nine subjects per cell limit both the reliability and
generalizability of the results. As a function of the small
sample size the standard deviations for each group were
large. This could be because of outliers or because of a
differential impact of the treatment, with some types of
people benefiting from the treatment and others not. Also
as a result of small sample sizes, and perhaps the method of
(at times) assigning subjects to one or another treatment
group, rather than randomly, pretreatment differences existed
between the groups. These pretreatment differences make
interpretation of the results difficult. The problem-solving
group scored more dysfunctionally across the dependent
measures at pretreatment. Thus, an alternative explanation
for the results is that the superior performance of the
problem-solving group on several of the variables is a result
of regression to the mean effects. Studies with samples for

which there are no pretreatment differences, accomplished
by either random assignment and larger sample sizes or by
matching samples on key dependent variables, would be useful
for further evaluating the efficacy of problem-solving
therapy.

A second limitation is the method of measurement of
interpersonal problem-solving ability. The pencil-and-paper
format limits the interpretation of the findings. One
important question it leaves unanswered is how the subjects
in the study solved real-life interpersonal problems. A
behavioral assessment conducted by observing individuals
solve interpersonal problems in a context such as role-
playing will be useful in future studies to more closely
approximate subjects' actual interpersonal problem-solving
behavior.

In conclusion, the superior impact of problem-solving
therapy on depression, hopelessness, and loneliness is
noteworthy. Hopelessness is one of the best predictors of
future suicidal behavior. Previous research supports the
finding that problem-solving therapy effectively reduces the
hopelessness of suicidal individuals (Patsiokas & Clum,
1985). The impact of problem-solving therapy on depression
is also important. Depression is a high risk factor for
suicidal behavior, with 10-15% of individuals diagnosed with
a major affective disorder committing suicide. It appears

that the effect of problem-solving therapy on depression, hopelessness and loneliness is a result of improvements in problem-solving self-efficacy. Suicidal ideations were reduced in both the problem-solving therapy and supportive therapy groups. This suggests that problem-solving therapy is not more efficacious than supportive therapy for treating suicidal ideations in the short-term. Given the impact of problem-solving therapy on psychological correlates of suicidal behavior, however, there may be a long-term superior effect of problem-solving therapy on suicidal ideations. Further research with longer follow-up periods and larger sample sizes, matching on key dependent variables will be useful for examining these hypotheses. In addition, future research needs to include a behavioral measure of interpersonal problem-solving ability in order to better predict how individuals will solve actual interpersonal problems.

REFERENCES

American Psychiatric Association (1987). Diagnostic and

statistical manual of mental disorders (3rd ed.,

Revised). Washington, D. C.: Author.

Bagley, C. (1968). The evaluation of a suicide prevention

scheme by an ecological method. Social Science and

Medicine, 2, 1-14.

Beck, A. (1967). Depression: Clinical, Experimental, and

Theoretical Aspects. New York: Paul B. Hoeber.

Beck, A., Kovacs, M., & Weissman, A. (1979). Assessment of

suicidal ideations: The scale for suicide ideators.

Journal of Consulting and Clinical Psychology, 47,

343-352.

Beck, A., Steer, R., Kovacs, M., & Garrison, B. (1985).

Hopelessness and eventual suicide: A 10-year prospective

study of patients hospitalized with suicidal ideation.

American Journal of Psychiatry, 142, 559-563.

Beck, A., Weissman, A., Lester, D., & Trexler, L. (1974).

The measurement of pessimism: The hopelessness scale.

Journal of Consulting and Clinical Psychology, 42,

862-865.

Braucht, G. (1979). Interactional analysis of suicidal

behavior. Journal of Consulting and Clinical

Psychology, 47, 653-669.

Brent, D. A. (1987). Correlates of the Medical Lethality of

Suicide Attempts in Children and Adolescents. <u>Journal</u>
<u>of American Academy of Child and Adolescent Psychiatry</u>,
<u>26</u>, 87-89.

Brent, D. A., Kalas, R., Edelbrock, C., Costello, A. J.,
Dulcan, M. K., Conover, N. (1986). Psychopathology and
its relationship to suicidal ideation in childhood and
adolescence. <u>Journal of the American Academy of Child</u>
<u>Psychiatry</u>, <u>25</u>, 666-673.

Cantor, P. (1976). Frequency of suicidal thought and
self-destructive behavior among females. <u>Suicide and</u>
<u>Life Threatening Behavior</u>, <u>6</u>, 92-100.

Chowdury, N., Hicks, R. C., & Kreitman, N. (1973).
Evaluation of an after-care service for parasuicide
patients. <u>Social Psychiatry</u>, <u>8</u>, 67-81.

Clum, G., Patsiokas, A., & Luscomb, R. (1979). Empirically
based comprehensive treatment program for parasuicide.
<u>Journal of Consulting and Clinical Psychology</u>, <u>47</u>,
937-945.

Cochrane, R., & Robertson, A. (1975). Stress in the lives of
parasuicides. <u>Social Psychiatry</u>, <u>10</u>, 161-171.

Deykin, E. Y., Hsieh, C. C., Joshi, N., & McNamara, J. J.
(1986). Adolescent suicidal and self-destructive
behavior: Results of an intervention study. <u>Journal of</u>
<u>Adolescent Health Care</u>, <u>7</u>, 88-95.

D'Zurilla, T., & Goldfried, M. (1971). Problem solving and

behavior modification. Journal of Abnormal Psychology, 78, 107-126.

Ellis, T. E., & Ratliff, K. G. (1986). Cognitive Characteristics of Suicidal and Nonsuicidal Psychiatric Inpatients. Cognitive Therapy and Research, 10, 625-634.

Fingerhut, L. A., & Kleinman, J.C. (1988). Letter to the editor. Journal of the American Medical Association, 259, 356.

Gibbons, J. S., Butler, J., Urwin, P., & Gibbons, J. L. (1978). Evaluation of a social work service for self-poisoning patients. British Journal of Psychiatry, 133, 111-118.

Gispert, M., Wheeler, K., Marsh, L., & Davis, M. (1985). Suicidal adolescents: Factors in evaluation. Adolescence, 20, 753-762.

Goldacre, M., & Hawton, K. (1985). Repetition of self-poisoning and subsequent death in adolescents who take overdoses. British Journal of Psychiatry, 146, 395-398.

Harkavy-Friedman, J. M., Asnis, G. M., Boeck, M., & Diofiore, J. (1987). Prevalence of specific suicidal behaviors in a high school sample. American Journal of Psychiatry, 144, 1203-1206.

Hawton, K., Bancroft, J., Catalan, J., Kingston, B.,

Stedeford, A., & Welch, N. (1981). Domiciliary and out-patient treatment of self-poisoning patients by medical and non-medical staff. Psychology and Medicine, 11, 169-177.

Heppner, P. P. (August, 1986). Manual for the Problem Solving Inventory (PSI). Paper presented at the meeting of the American Psychological Association, Washington, D. C.

Jennings, C., Barraclough, B. M., Moss, J. R. (1978). Have the Samaritans lowered the suicide rate? A controlled study. Psychology and Medicine, 8, 413-422.

Lester, D. (1974). Effect of suicide prevention centers on suicide rates in the United States. Health Services Report, 89, 37-39.

Lettieri, D. (1978). Drugs and Suicide: When Other Coping Strategies Fail. Beverly Hills, CA: Sage.

Levenson, M. (1972). Cognitive and perceptual factors in suicidal individuals. Unpublished doctoral dissertation. University of Kansas.

Levenson, M., & Neuringer, C. (1971). Problem solving behavior in suicidal adolescents. Journal of Consulting and Clinical Psychology, 37, 433-436.

Liberman, R., & Eckman, T. (1981). Behavior therapy vs. insight-oriented therapy for repeated suicide attempters. Archives of General Psychiatry, 38,

1126-1130.

Miles, C. (1977). Conditions predisposing to suicide: A

review. Journal of Nervous and Mental Disorders, 164,

231-246.

Miller, H. L., Coombs, D. W., Leeper, J. D., & Barton, S. N.

(1984). An analysis of the effects of suicide

prevention facilities on suicide rates in the United

States. American Journal of Public Health, 74, 340-343.

Miller, I. W., Norman, W. H., Bishop, S. B., & Dow, M. G.

(1986). The Modified Scale for Suicidal Ideation:

Reliability and Validity. Journal of Consulting and

Clinical Psychology, 5, 724-725.

Minear, J. D., & Brush, L. R. (1980-81). The

correlations of attitudes toward suicide with death

anxiety, religiosity, and personal closeness to

suicide. Omega, 111, 317-324.

Mishara, B. L. (1982). College students' experiences with

suicide and reactions to suicide verbalizations: A model

for prevention. Journal of Community Psychology, 10,

142-150.

Mishara, B. L., Baker, A. H., & Mishara, T. T. (1976). The

frequency of suicide attempts: A retrospective approach

to college students. American Journal of Psychiatry,

13, 841-844.

Minkoff, K., Bergman, E., Beck, A., & Beck, R. (1973).

Hopelessness, depression, and attempted suicide.
American Journal of Psychiatry, 130, 455-459.

Motto, J. A. (1984). Suicide in male adolescents. In H. S.
Sudak, A. B. Ford, & N. B. Rushforth (Eds.), Suicide in
the young (pp. 227-244). Boston Wright, PSG, Inc.

Motto, J. A., Heilbron, D. C., & Juster, R. P. (1985).
Development of a clinical instrument to estimate suicide
risk. American Journal of Psychiatry, 142, 680-686.

Nelson, V., Nielson, E., & Checketts, K. (1977).
Interpersonal attitudes of suicidal individuals.
Psychological Reports, 40, 984-989.

Neuringer, C. (1964). Rigid thinking in suicidal
individuals. Journal of Consulting Psychology, 28,
54-58.

Nezu, A. M. (1986). Efficacy of a social problem-solving
therapy approach for unipolar depression. Journal of
Consulting and Clinical Psychology, 54, 196-202.

Otto, U. (1972). Suicidal act by children and adolescents: A
follow-up study. Acta Psychiatrica Scandanavia
Supplement, 233, 5-123.

Patsiokas, A., & Clum, G. (1985). Effects of
psychotherapeutic strategies in the treatment of suicide
attempters. Psychotherapy, 22, 281-290.

Patsiokas, A., Clum, G., & Luscomb, R. (1979). Cognitive
characteristics of suicide attempters. Journal of

Consulting and Clinical Psychology, 47, 478-484.

Paykel, E., Prusoff, B., & Myers, J. (1975). Suicide
attempts and recent life events. Archives of General
Psychiatry, 32, 327-333.

Platt, J., & Spivack, G. (1975). Manual for the Means-End
Problem-Solving Procedure (MEPS): A Measure of
Interpersonal Problem-Solving Skill. Philadelphia:
Hahnemann Medical College and Hospital, Department of
Mental Health Sciences, Hahnemann University.

Rosenberg, M. L., Smith, J. C., Davidson, L. E., & Conn,
J. M. (1987). The emergence of youth: An epidemiologic
analysis and public health perspective. Annual Review
of Public Health, 8, 417-427.

Russell, D., Peplau, L., & Cutrona, C. (1980). Revised UCLA
Loneliness Scale: Concurrent and discriminant validity
evidence. Journal of Personality and Social Psychology,
39, 472-480.

Sarason, I., Johnson, J., & Siegel, J. (1978). Assessing the
impact of life changes: Development of the Life
Experiences Survey. Journal of Consulting and Clinical
Psychology, 46, 932-946.

Schotte, D., & Clum, G. (1982). Suicide ideation in a
college population: A test of a model. Journal of
Consulting and Clinical Psychology, 50, 690-696.

Schotte, D., & Clum, G. (1987). Problem-solving skills in

suicidal psychiatric patients. <u>Journal</u> <u>of</u> <u>Consulting</u>
<u>and</u> <u>Clinical</u> <u>Psychology</u>, <u>55</u>, 49-55.

Shaffi, M., Carrrigan, S., Whittinghill, J. R., Derrick, A.
(1985). Psychological autopsy of completed suicide in
children and adolescents. <u>American</u> <u>Journal</u> <u>of</u>
<u>Psychiatry</u>, <u>142</u>, 1061-1064.

Shneidman, E. S., & Farberow, N. L. (1965). The Los Angeles
Suicide Prevention Center: A demonstration of public
health feasibilities. <u>American</u> <u>Journal</u> <u>of</u> <u>Public</u>
<u>Health</u>, <u>55</u>, 21-26.

Smith, K., & Crawford, S. (1986). Suicidal behavior among
"normal" high school students. <u>Suicide</u> <u>and</u> <u>Life</u>
<u>Threatening</u> <u>Behavior</u>, <u>16</u>, 313-325.

Spirito, A., Brown, L., Overholser, J., & Fritz, G. (1989).
Attempted suicide in adolescence: A review and critique
of the literature. <u>Clinical</u> <u>Psychology</u> <u>Review</u>, <u>9</u>,
335-363.

Varah, C. (1977). Why and how I started the Samaritans. <u>The</u>
<u>Samaritans</u>, (special issue) 2-3.

Weiner, I. W. (1969). The effectiveness of a suicide
prevention program. <u>Mental</u> <u>Hygiene</u>, <u>53</u>, 357-363.

Wellman, R. J., & Wellman, M. M. (1988). Correlates of
suicide ideation in a college population. <u>Social</u>
<u>Psychiatry</u> <u>and</u> <u>Psychiatric</u> <u>Epidemiology</u>, <u>23</u>, 90-95.

Welu, T. C. (1977). a follow-up program for suicide

attempters: Evaluation of effectiveness. <u>Suicide and</u>

<u>Life Threatening Behavior</u>, <u>7</u>, 17-30.

Wetzel, R. (1976). Hopelessness, depression , and suicide

intent. <u>Archives of General Psychiatry</u>, <u>33</u>, 1069-1073.

Zung, W. (1965). A self-rating depression scale. <u>Archives</u>

<u>of General Psychiatry</u>, <u>12</u>, 63-70.

Table1

Subject Characteristics

	Problem-Solving Therapy	Supportive Therapy	Combined
Sex, No. (%)			
Female	8 (89%)	6 (67%)	14 (78%)
Male	1 (11%)	3 (33%)	4 (22%)
Race, No. (%)			
Caucasian	8 (89%)	9 (100%)	17 (94%)
Afro-American	1 (11%)	0 (0%)	1 (6%)
Marital Status			
Single, No. (%)	9 (100%)	9 (100%)	18 (100%)
Education/Employment			
Undergraduate			
Students, No. (%)	9 (100%)	9 (100%)	18 (100%)
Medication, No. (%) (anti-depressants)	2 (22%)	0 (0%)	2 (11%)
Individual Therapy, No. (%)	1 (11%)	2 (22%)	3 (33%)
No. of Past Attempts, No. (%)			
0	3 (33%)	5 (56%)	8 (44%)
1	4 (44%)	1 (11%)	5 (28%)
2	2 (22%)	2 (22%)	4 (22%)
4	0 (0%)	1 (11%)	1 (6%)
Age			
Mean	18.78	19.56	19.17
SD	.83	1.74	1.38
Range	18 - 20	18 - 22	18 - 22
Duration of Ideations, years			
Mean	3.42	3.10	3.26
SD	3.87	2.91	3.32
Range	.1 - 13	.1 - 9	.1 - 13
Suicidal Ideations Two Weeks Prior to Treatment, No.per week			
Mean	2.56	2.94	2.75
SD	2.61	2.55	2.51
Range	.5 - 7	.5 - 7	.5 - 7

Table 2

<u>Means</u> <u>and</u> <u>Standard</u> <u>Deviations</u> <u>for</u> <u>the</u> <u>Dependent</u> <u>Measures</u>

Measure	Pretreatment		Posttreatment		Follow-Up	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Problem-solving therapy						
MSSI	25.4	6.0	5.8	7.0	4.7	3.4
BDI	27.0	9.2	8.9	8.6	2.7	2.7
ZUNG	56.3	8.8	39.1	10.0	31.1	5.1
HS	15.4	3.9	4.6	3.2	1.8	1.2
UCLA	56.3	11.7	42.0	13.1	31.6	5.0
PSI TOTAL	124.8	24.4	89.9	21.1	86.3	18.5
Confidence	40.3	11.2	26.7	8.8	23.4	5.9
Approach-Avoid	58.7	14.8	44.1	12.4	42.8	9.5
Control	25.7	3.2	19.1	3.5	19.0	5.6
MEPS						
No. of solns	4.1	1.5	3.9	1.5	3.8	1.2
Quality of soln	5.6	2.8	5.6	1.6	5.4	2.3
Consequences						
(−)	1.5	.6	1.5	.8	1.5	.8
(+)	1.8	.7	1.4	.6	1.5	.7
Relevant means	.8	.7	1.3	.7	1.0	.9
STRESS	7.1	1.2	4.1	1.7		
Supportive Therapy						
MSSI	19.4	5.9	5.3	9.2	10.6	8.8
BDI	17.4	8.4	14.3	10.1	12.4	11.4
ZUNG	48.1	6.0	44.2	6.0	39.7	10.9
HS	7.6	5.3	5.2	6.5	5.0	6.3
UCLA	51.6	11.0	45.1	10.7	41.8	7.8
PSI TOTAL	105.1	13.4	102.7	22.8	99.0	27.9
Confidence	35.7	6.6	33.4	10.8	29.7	10.6
Approach-Avoid	48.2	10.3	48.9	11.6	48.7	13.6
Control	21.2	2.9	20.4	4.4	20.7	4.4
MEPS						
No. of solns	2.9	1.3	3.4	1.7	3.3	1.7
Quality of soln	4.0	3.2	5.2	1.2	6.2	1.9
Consequences						
(−)	1.1	.9	1.4	1.0	1.2	.8
(+)	1.3	.9	1.2	.7	1.9	.9
Relevant means	.7	.9	.6	.9	.6	.9
STRESS	6.4	1.3	5.3	2.0		

Table 3

Analyses of Covariance at Posttreatment and Follow-Up Comparing

Problem-Solving Therapy and Supportive Therapy

| | Assessment Period | |
Dependent measure	Posttreatment	Follow-up
MSSI	<1	1.87
BDI	6.40*	8.37**
ZUNG	1.58	2.40
HS	3.60	5.13*
UCLA	3.08	11.60**
PSI Total	4.95*	3.74
Confidence	4.26*	3.68
Approach-Avoid	4.60*	2.91
Control	3.88	3.59
MEPS		
No. of solns	<1	<1
Quality of soln	<1	1.16
Consequences		
(-)	<1	<1
(+)		
Relevant means	4.04 (p=.06)	1.00
STRESS	3.30	

Note.   Df=(1,15).   *p<.05; **p<.01.

Table 4

Within-Group t Tests From Pretreatment to Posttreatment and From
Pretreatment To Follow-Up

Measure	Problem-Solving Therapy		Supportive Therapy	
	Pre- to Post	Pre- to Follow-up	Pre- to Post	Pre- to Follow-up
MSSI	5.61*	7.33*	4.52	2.54
BDI	5.05*	7.28*	1.64	1.52
ZUNG	4.29	7.22*	1.25	1.87
HS	5.88*	9.53*	1.85	1.33
UCLA	4.33	7.31*	3.19	2.22
PSI Total	5.23*	5.67*	<1	<1
Confidence	4.20	4.55	<1	2.00
Approach-Avoid	4.14	4.55	<1	<1
Control	7.16*	4.50	<1	<1
MEPS				
No. of solns	<1	<1	-1.25	<1
Quality of soln	<1	<1	-1.55	-2.11
Consequences				
(-)	<1	<1	<1	<1
(+)	1.84	1.38	<1	-1.74
Relevant means	2.29	1.00	<1	<1
STRESS	5.36*		1.78	

Note.   Df=8.   *$p \leq .05$, using Bonferroni t tests.

Table 5

Number of Suicidal Ideations Per Week From Daily Self-Monitoring
During Treatment

Problem-Solving Therapy

Week

Subject	1	2	3	4	5
1	1	1	0	0	0
2	1	3	2	0	0
3	3	2	2	1	0
4	2	1	2	0	0
5	1	3	1	0	0
6	0	0	0	1	0
7	0	3	0	0	0

Supportive Therapy

Week

Subject	1	2	3	4	5
1	4	3	0	0	0
2	2	2	1	0	0
3	0	0	0	0	0
4	0	0	1	1	3

Table 6

Mean Stress on Weekly Stressor Scales

Problem-Solving Therapy

Assessment Week

Subject	Pre	1	2	3	4	5	Post
1	6.7	7.0	5.2	2.6	6.6	4.6	4.1
2	5.0	7.0	4.4	2.6	7.8	5.2	3.8
3	6.4	5.0	4.6	5.0	6.4	4.6	3.8

Supportive Therapy

Assessment Week

Subject	Pre	1	2	3	4	5	Post
1	5.6	5.6	7.2	4.6	6.4	5.4	5.4
4	4.8	6.6	6.2	6.0	4.8	4.0	2.0
5	5.8	5.0	5.2	5.2	6.0	5.2	4.4
6	8.4	8.4	5.5	5.2	6.0	5.8	5.8
7	7.8	7.8	7.4	8.4	8.4	8.0	8.2
8	5.0	6.0	5.0	5.8	7.8	7.8	7.8

Appendix A

Consent Form
Treatment of Suicidal Thoughts Project

I, _____, freely and voluntarily consent
to participate in a research program entitled, "Treatment
of Suicidal Thoughts," to be conducted by Dr. George A.
Clum, Ph.D. The procedures to be followed have been
explained to me, and I understand them. They are as
follows:

1. I understand that I am to undergo the following
assessment procedures:
   a. Two interviews with project staff personnnel, one to
      determine if I have a moderate to high degree of
      suicidal thoughts; a second to assess the severity
      and dimensions of the thoughts.
   b. Complete a set of questionnnaires designed to assess
      a variety of psychological states associated with
      depression, stress, and problem solving.

2. I understand that the assessment process will require
approximately three hours of my time. At the end of the
assessment period I will be given information obtained
from the assessment regarding my suicidal thoughts.

3. I understand that I will receive three credits for my
participation in the assessment and that my participation
in the treatment is optional. I further understand that I
am free to withdraw from the study at any time and still
receive full credit.

4. I understand that I may be offered treatment within
the context of the Suicide Ideation Project. If offered
treatment, I will be assigned to one of two treatments. Each
treatment consists of 10 dr/½-hour sessions of group
therapy. One group therapy will be Supportive Therapy,
one other will be Problem-Solving Therapy. I may also not
be assigned to a treatment group and may be referred
elsewhere for additional counseling if necessary.

5. I understand that at a period after the first
assessment of 3 months I will be asked to return for an
additional assessment of two hours for the purpose of
monitoring my progresss. One month prior to the
follow-up, I agree to monitor the frequency of my suicidal
thoughts.

6. I understand that all information obtained from me
will be held strictly confidential by the treatment staff.
Futhermore, in any scientific report of this project,
there will be no way to identify me.

7. I understand that I may experience some discomfort when discussing conflict or stress situations during the treatment sessions; however, it is anticipated that the overall effects of treatment, if completed, will be beneficial.

8. I agree to contact the therapist of the treatment group or the local crisis hotline if I feel highly suicidal during the treatment period.

I hereby agree to voluntarily participate in the research project described above and under the conditions described above,

-------------------   -----------------   ----------
Client's Signature   Student Number   Date

-------------------   -----------
Witness   Date

Client's Phone Number: _____

****

The research project has been approved by the Human Subjects Research Committee and the Institutional Review Board, and any questions that you might have about the project should be directed to:

Dr. George A. Clum, Project Director (Office, 961-5701 or Home,   ')

Miriam S. Lerner, Assistant (Office, 961-6914 or Home,   )

Mr. Charles D. Waring, chairperson, Institutional REview Board (961-5283)

Dr. Steve Zacaro, Chairperson, Human Subjects Committee, Department of Psychology (961-7916)

Code number: Date:

Parasuicide Ideation Interview

Current Ideation

1. In the last 4 weeks have you thought about committing suicide? or wanting to die?   Yes   No

2. How often?

3. In the last 4 weeks have you attempted suicide?   Yes   No

    If yes, how often?

4. What situations or feelings have been setting off your suicidal thoughts (or attempts)?

        Situations:

        Feelings:

History

4. Have you thought about suicide previous to the past 4 weeks?
        Yes   No   (If No, skip to #5).
        If Yes, when? Dates: From   to

5. Have you attempted suicide previous to the past 4 weeks?
        Yes   No   (If No, skip to #6).
        If Yes, when? Dates: From   to

7. What situations or feelings were setting off your thoughts (or attempts) then?

        Situations:

        Feelings:

Present

8. What needs to be done, or what needs to change so that you won't attempt or think about attempting suicide in the future?

9. Do you know anyone who has attempted suicide or talked about suicide

The Modified Scale for Suicidal Ideation

Ivan W. Miller

William H. Norman

Stephen B. Bishop

Michael G. Dow

Department of Psychiatry and Human Behavior

Brown University and Butler Hospital

Name_____   Total Score_____

Date_____

Instructions

The purpose of this scale is to assess the presence or absence of suicide ideation and the degree of severity of suicidal ideas. The time frame is from the point of interview and the previous 48 hours.

1. Wish to die

Do you want to die now?
Over the past day or two have you thought about wanting to die?
(If the patient wants to die ask: Over the past day or two how often have you had the thought that you wanted to die? A little? Quite often? a lot?
When you have wished for death, how strong has the desire been? Weak?
Moderately strong? Very strong?)

    0. None - no current wish to die, hasn't had any thought about wanting to die.
    1. Weak - unsure about whether he/she wants to die, seldom thinks about death, or intensity seems low.
    2. Moderate - current desire to die, may be preoccupied with ideas about death, or intensity seems greater than a rating of 1.
    3. Strong - current death wish, high frequency or high intensity during the past day or two.

2. Wish to live

Do you care if you live or die?
Over the past day or two have you thought that you want to live?
(if the patient wants to live ask: Over the past day or two how often have you thought about wanting to live? A little? Quite often? A lot? How sure are you that you really want to live?)

    0. Strong - current desire to live, high frequency or high intensity.
    1. Moderate - current desire to live, thinks about wanting to live quite often, can easily turn his/her thoughts away from death or intensity seems more than a rating of 2.
    2. Weak - unsure about whether he/she wants to live, occasional thoughts about living or intensity seems low.
    3. None - patient has no wish to live.

3. Desire to make an active suicide attempt

Do you want to kill yourself now?
Over the past day or two when you have thought about suicide
did you want to kill youself? How often? A little? Quite often? A lot?

    0. None - patient may have had thoughts but does not want to make an attempt.
    1. Weak - patient isn't sure whether he/she wants to make an attempt.
    2. Moderate - wanted to act on thoughts at least once in the last 48 hours.
    3. Strong - wanted to act on thoughts several times and/or almost certain he
       wants to kill self.

4. Passive suicide attempt

Right now would you deliberately ignore taking care of your health?
Do you feel like trying to die by eating too much (too little), drinking too
much (too little), or by not taking needed medications?
Have you felt like doing any of these things over the past day or two?
Over the past day or two, have you thought it might be good to leave life or death to chance, for
example, carelessly crossing a busy street, driving recklessly, or even walking alone at night in a
rough part of town?

    0. None - would take precautions to maintain life.
    1. Weak - not sure whether he/she would leave life/death to chance, or has
       thought about gambling with fate at least once in the last two days.
    2. Moderate - would leave life/death to chance, almost sure he/she would gamble.
    3. Strong - avoided steps necessary to maintain or save life, e.g., stopped taking
       needed medications.

5. Duration of thoughts

Over the past day or two when you have thought about suicide how long did he thoughts last?
Were they fleeting, e.g., a few seconds?
Did they occur for a while, then stop, e.g., a few minutes?
Did they occur for longer periods, e.g., an hour at a time?
Is it to the point where you can't seem to get them out of your mind?

    0. Brief - fleeting periods.
    1. Short duration - several minutes.
    2. Longer - an hour of more.
    3. Almost continuous - patient finds it hard to turn attention away from suicidal
       thoughts, can't seem to get them out of his/her mind.

6. Frequency of ideation

Over the last day or two how often have you thought about suicide? Once a day? Once an hour? More than that? All the time?

0. Rare - once in the past 48 hours.
1. Twice or more over the last 48 hours.
2. Occurs approximately every hour.
3. Several times an hour.

7. Intensity of thoughts

Over the past day or two, when you have thought about suicide, have they been intense (powerful) How intense have they been? Weak? Somewhat strong? Moderately strong? Very strong?

0. Very weak.
1. Weak.
2. Moderate.
3. Strong.

8. Deterrent to active attempt

Can you think of anything that would keep you from killing yourself? (Your religion, consequences for your family, chance that you may injure yourself seriously if unsuccessful).

0. Definite deterrent - wouldn't attempt suicide because of deterrents. Patient must name one deterrent.
1. Probable deterrent - can name at least one deterrent, but does not definitely rule out suicide.
2. Questionable deterrent - patient has trouble naming any deterrents, seems focused on the advantages to suicide, minimal concern over deterrents.
3. No deterrents - no concern over consequences to self or others.

9. Reasons for living and dying   5

Right now can you think of any reasons why you should stay alive?
What about over the past day or two?
Over the past day or two have you thought that there are things happening in your life that make you want to die?
(If the patient says there are clear reasons for living and dying, ask what hey are and write them verbatim in the section provided. Ask the remaining the questions)

Living   ### Dying

Do you think that your reasons for dying are better than your reasons for living?
Would you say that your reasons for living are better than your reasons for dying?
Are your reasons for living and dying about equal in strength, 50-50?

0. Patient has no reasons for dying, never occured to him/her to weigh reasons.
1. Has reasons for living and occasionally has thought about reasons for dying.
2. Not sure about which reasons are more powerful, living and dying are about equal, or those for dying slightly outweigh those for living.
3. Reasons for dying strongly outweigh those for living, can't think of any reasons for living.

10. Method: Degree of specificity/planning

Over the last day or two have you been thinking about a way to kill yourself, the method you might use?
Do you know where to get these materials?
Have you thought about jumping from a high place? Where would you jump?
Have you thought about using a car to kill yourself? Your own? Someoneelse's? What highway or road would you use?
When would you try to kill yourself? Is there a special event (e.g., anniversary, birthday with which you would like to associate your suicide?
Have you thought of any other ways you might kill yourself? (note details verbatim).

0. Not considered, method not thought about.
1. Minimal consideration.
2. Moderate consideration.
3. Details worked out, plans well formulated.

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11. Method: Availability/opportunity

Over the past day or two have you thought methods are available to you to commit suicide?
Would it take time/effort to create an opportunity to kill yourself?
Do you forsee opportunities being available to you in the near future (e.g. leaving hospital)?

    0. Method not available, no opportunity.
    1. Method would take time/effort, opportunity not readily available, e.g., would have to purchase poisons, get prescription, borrow or buy a gun.
    2. Future opportunity or availability anticipated - if in hospital when patient got home, pills or gun available.
    3. Method/opportunity available - pills gun, car available, patient may have selected a specific time.

12. Sense of courage to carry out attempt

Do you think you have the courage to commit suicide?

    0. No courage, too weak, afraid.
    1. Unsure of courage.
    2. Quite sure.
    3. Very sure.

13. Competence

Do you think you have the ability to carry out your suicide?
Can you carry out the necessary steps to insure a successful suicide?
How convinced are you that you would be effective in bringing an end to your life?

    0. Not competent.
    1. Unsure.
    2. Somewhat sure.
    3. Convinced that he/she can do it.

14. Expectancy of actual attempt

Over the last day or two have you thought that suicide is something you really might do sometime?
Right now what are the chances you would try to kill yourself if left along to your own devices?
Would you say the chances are less than 50%? About equal? More than 50%?

0. Patient says he/she definitely would not make an attempt.
1. Unsure - might make an attempt but chances are less than 50% or about equal, 50-50.
2. Almost certain - chances are greater than 50% that he/she would try to commit suicide?
3. Certain - patient will make an attempt if left by self (i.e., if not in hospital or not watched).

15. Talk about death/suicide

Over the last day or two have you noticed yourself talking about death more than usual?
Can you recall whether or not you spoke to anybody, even jokingly, that you might welcome death or try to kill yourself?
Have you confided in a close friend, religious person, or professional?
helper that you intend to commit suicide?

0. No talk of death/suicide.
1. Probably talked about death more than usual but no specific mention of death wish. May have alluded to suicide using humor.
2. Specifically said that he/she wants to die.
3. Confided that he/she plans to commit suicide.

16. Writing about death/suicide

Have you written about death/suicide e.g. poetry, in a personal diary?

0. No written material.
1. General comments regarding death.
2. Specific reference to death wish.
3. Specific reference to plans for suicide.

17. Suicide note

Over the last day or two have you thought about leaving a note or writing a letter to somebody about your suicide?
Do you know what you'd say? Who would you leave it for? Have you written it out yet?
Where did you leave it?

0. None - hasn't thought about a suicide note.
1. "Mental note" - has thought about a suicide note, those he/she might give it to, possibly worked out general themes which would be put in the note (e.g., being a burden to others, etc.)
2. Started - suicide note partially written, may have misplaced it.
3. Completed note - written out, definite plans about content, addressee.

18. Actual preparation

Over the past day or two have you actually done anything to prepare for your suicide, e.g., collected material, pills, guns, etc.?

0. None - no preparation.
1. Probable preparation - patient not sure, may have started to collect materials.
2. Partial preparation - definitely started to organize method of suicide.
3. Complete - has pills, gun, or other devices that he needs to kill self.

BECK INVENTORY

Name_____ Date_____

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1 0 I do not feel sad.
   1 I feel sad.
   2 I am sad all the time and I can't snap out of it.
   3 I am so sad or unhappy that I can't stand it.

2 0 I am not particularly discouraged about the future
   1 I feel discouraged about the future.
   2 I feel I have nothing to look forward to.
   3 I feel that the future is hopeless and that things cannot improve.

3 0 I do not feel like a failure.
   1 I feel I have failed more than the average person.
   2 As I look back on my life, all I can see is a lot of failures.
   3 I feel I am a complete failure as a person.

4 0 I get as much satisfaction out of things as I used to.
   1 I don't enjoy things the way I used to
   2 I don't get real satisfaction out of anything anymore.
   3 I am dissatisfied or bored with everything.

5 0 I don't feel particularly guilty.
   1 I feel guilty a good part of the time.
   2 I feel quite guilty most of the time.
   3 I feel guilty all of the time.

6 0 I don't feel I am being punished.
   1 I feel I may be punished.
   2 I expect to be punished.
   3 I feel I am being punished.

7 0 I don't feel disappointed in myself.
   1 I am disappointed in myself.
   2 I am disgusted with myself.
   3 I hate myself.

8 0 I don't feel I am any worse than anybody else.
   1 I am critical of myself for my weaknesses or mistakes.
   2 I blame myself all the time for my faults.
   3 I blame myself for everything bad that happens.

9 0 I don't have any thoughts of killing myself.
   1 I have thoughts of killing myself, but I would not carry them out.
   2 I would like to kill myself.
   3 I would kill myself if I had the chance.

10 0 I don't cry any more than usual
   1 I cry more now than I used to
   2 I cry all the time now.
   3 I used to be able to cry, but now I can't cry even though I want to.

11 0 I am no more irritated now than I ever am.
   1 I get annoyed or irritated more easily than I used to
   2 I feel irritated all the time now
   3 I don't get irritated at all by the things that used to irritate me.

12 0 I have not lost interest in other people.
   1 I am less interested in other people than I used to be
   2 I have lost most of my interest in other people.
   3 I have lost all of my interest in other people.

13 0 I make decisions about as well as I ever could.
   1 I put off making decisions more than I used to.
   2 I have greater difficulty in making decisions than before.
   3 I can't make decisions at all anymore.

14 0 I don't feel I look any worse than I used to.
   1 I am worried that I am looking old or unattractive.
   2 I feel that there are permanent changes in my appearance that make me look unattractive.
   3 I believe that I look ugly.

15 0 I can work about as well as before.
   1 It takes an extra effort to get started at doing something.
   2 I have to push myself very hard to do anything.
   3 I can't do any work at all.

16 0 I can sleep as well as usual.
   1 I don't sleep as well as I used to.
   2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
   3 I wake up several hours earlier than I used to and cannot get back to sleep.

17 0 I don't get more tired than usual.
   1 I get tired more easily than I used to.
   2 I get tired from doing almost anything.
   3 I am too tired to do anything.

18 0 My appetite is no worse than usual.
   1 My appetite is not as good as it used to be.
   2 My appetite is much worse now.
   3 I have no appetite at all anymore.

19 0 I haven't lost much weight, if any, lately.   I am purposely trying to lose
   1 I have lost more than 5 pounds.   weight by eating less. Yes_____ No
   2 I have lost more than 10 pounds.
   3 I have lost more than 15 pounds.

20 0 I am no more worried about my health than usual.
   1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
   2 I am very worried about physical problems and it's hard to think of much else.
   3 I am so worried about my physical problems that I cannot think about anything else.

21 0 I have not noticed any recent change in my interest in sex.
   1 I am less interested in sex than I used to be
   2 I am much less interested in sex now
   3 I have lost interest in sex completely

Appendix E

AGE: _____ SEX: _____ DATE: _____

	None OR a Little of the Time	Some of the Time	Good Part of the Time	Most OR all of the Time
I feel down-hearted, blue and sad				
Morning is when I feel best				
I have crying spells or feel like it				
I have trouble sleeping through the night				
I eat as much as I used to				
I enjoy looking at, talking to and being with attractive men/women				
I notice that I am losing weight				
I have trouble with constipation				
My heart beats faster than usual				
I get tired for no reason				
My mind is as clear as it used to be				
I find it easy to do the things I used to do				
I am restless and can't keep still				
I feel hopeful about the future				
I am more irritable than usual				
I find it easy to make decisions				
I feel that I am useful and needed				
My life is pretty full				
I feel that others would be better off if I were dead				
I still enjoy the things I used to do				

BECK-H-SCALE

INSTRUCTIONS: On this questionnaire are a number of statements. Please read
each statement carefully. If the statement is true, or mostly true,
circle the T in front of the statement. If the statement is false, i.e.
you do not believe it, circle the F. We are interested in how you
feel today, that's right now.

T F 1. I look forward to the future with hope and enthusiasm.

T F 2. I might as well give up because I can't make things go
better for myself.

T F 3. When things are going badly, I am helped by knowing they
can't stay that way forever.

T F 4. I can't imagine what my life would be like in 10 years.

T F 5. I have enough time to accomplish the things I most wanted
to do.

T F 6. In the future, I expect to succeed in what concerns me most.

T F 7. My future seems dark to me.

T F 8. I expect to get more of the good things in life than the
average person.

T F 9. I just don't get the breaks, and there's no reason to believe
I will in the future.

T F 10. My past experiences have prepared me well for my future.

T F 11. All I can see ahead of me is unpleasantness rather than
pleasantness.

T F 12. I don't expect to get what I really want.

T F 13. When I look ahead to the future, I expect I will be happier
than I am now.

T F 14. Things just won't work out the way I want them to.

T F 15. I have great faith in the future.

T F 16. I never get what I want so it's foolish to want anything.

T F 17. It is very unlikely that I will get real satisfaction in
the future.

T F 18. The future seems vague and uncertain to me.

T F 19. I can look forward to more good times than bad times.

T F 20. There's no use in really trying to get something I want
because I probably won't get it.

Appendix G

Modified MEPS

Please list below as many as ten different problems (such as relationship problems, problems with friends or school, financial difficulties, etc.) which you feel helped lead to your suicidal thoughts.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

STEP TWO: Please read the following situation. You are given both a
            present situation and a desired outcome. Please read this,
            carefully; you will be using this situation throughout the
            rest of this procedure.

Present Situation:

_____

_____

_____

_____

Desired Outcome:

STEP THREE: Now that you have read about the problem situation and the desired outcome, please list as many as six different things you could do to solve the problem. That is, write down as many as six different things you could do to reach the desired outcome. You will find space for each of your ideas on this page and on the two pages that follow; the spaces in which you are to write your answers are the ones numbered from one to six.

1) _____

     0   1   2   3   4   5   6   7   8   9   10

Pros and Cons:

_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3

2) _____

     0   1   2   3   4   5   6   7   8   9   10

Pros and Cons:

_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 2 3
_____   -3 -2 -1 0 1 3 4

3) _____

        0   1   2   3   4   5   6   7   8   9   10

Pros and Cons:

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

4) _____

        0   1   2   3   4   5   6   7   8   9   10

Pros and Cons:

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

_____   -3 -2 -1 0 1 2 3

5) _____

        0   1   2   3   4   5   6   7   8   9   10

Pros and Cons:

_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3

6) _____

        0   1   2   3   4   5   6   7   8   9   10

Pros and Cons:

_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3
_____ -3 -2 -1 0 1 2 3

STEP FOUR: Now that you have written down some of the things you think
              you could do to solve the problem (to reach the desired out-
              come), please go back and circle the number below each alter-
              native which you believe is closest to how likely that action
              would be to solve the problem. If you think there is no chance
              that it will work, circle the number 0. If you think there is
              a fair chance it will work, circle the number 5. If you are
              sure it will work, circle the number 10. Just circle any
              number between 0 and 10 that you think shows how likely that
              plan is to work.

STEP FIVE: Now that you have told us how likely each plan is to work,
              please go back to the different ideas you wrote down and tell
              us what the Pros (good things, benefits, etc.) of each plan
              are, and what the Cons (bad things, costs, etc.) are for each
              of these. For example, you may think one of your ideas might
              make someone mad; this would be a Con (bad thing). Or you
              might think one of your ideas might make someone happy and
              solve the problem at the same time; this would be a Pro (good
              thing). Please list as many as six Pros and Cons for each
              plan you wrote down.

STEP SIX: Now go back and rate how important each Pro and Con is. If a
              Pro is very good or important, circle the number 3. If it is
              only fairly important, circle the number 2. If it is only a
              little important or good, circle the number 1. If a con is
              very bad, circle the -3. If it is fairly bad, circle the -2.
              If it is only a little bad, circle the -1. Finally, if it
              does not matter, circle the 0.

STEP SEVEN: Now we would like you to write a story in which you go about
             achieving the desired outcome. That is, we want you to write
             a story in which you solve the problem which you have been
             working on in this task. Begin with the beginning you are
             given and write the middle part of the story. Here are the
             beginning and ending for your story.

_____ _____

_____ _____

_____

_____

Please write your story:

Appendix H
Problem Solving Inventory

Purpose: This is not a test. There are no right or wrong answers. Rather it is an inventory designed to find out how people normally react to problems and events in their daily interactions. We are not talking about math or science problems, but rather about personal or social problems, such as feeling depressed, getting along with friends, choosing a career, or deciding whether to break up with a girlfriend or boyfriend. Please respond to the items as honestly as you can so as to most accurately portray how you handle problems. Don't respond to the statements as you think you should in order to solve problems--rather respond to the statements as honestly as you can, and in such a way so as to most accurately reflect how you actually behave when you solve personal problems.

Ask yourself: Do I ever do this behavior?

Directions: Below is a list of 35 statements. Read each statement, and then indicate the extent to which you agree or disagree with that statement, using the folowing alternatives:

1 = Stronly Agree
2 = Moderately Agree
3 = Slightly Agree
4 = Slightly Disagree
5 = Moderately Disagree
6 = Strongly Disagree

Please mark your response (the number) next to each statement.

Read each statement, and indicate the extent to which you agree or disagree with that statement, using the following alternatives:

1 = Strongly Agree
2 = Moderately Agree
3 = Slightly Agree
4 = Slightly Disagree
5 = Moderately Disagree
6 = Strongly Disagree

1. When a solution to a problem is unsuccessful, I do not examine why it didn't work.

2. When I am confronted with a complex problem, I do not bother to develop a strategy to collect information so I can define exactly what the problem is.

3. When my first efforts to solve a problem fail, I become uneasy about my ability to handle the situation.

4. After I have solved a problem, I do not analyze what went right or what went wrong.

5. I am usually able to think up creative and effective alternatives to solve a problem.

6. After I have tried to solve a problem with a certain course of action, I take time and compare the actual outcome to what I thought should have happened.

7. When I have a problem, I think up as many possible ways to handle it as I can until I can't come up with any more ideas.

8. When confronted with a problem, I consistently examine my feelings to find out what is going on in a problem situation.

9. When I am confused with a problem, I do not try to define vague ideas or feelings into concrete or specific terms.

10. I have the ability to solve most problems even though initially no solution is immediately apparent.

11. Many problems I face are too complex for me to solve.

12. I make decisions and am happy with them later.

13. When confronted with a problem, I tend to do the first thing that I can think to solve it.

14. Sometimes I do not stop and take time to deal with my problems, but just kind of muddle ahead.

15. When deciding on an idea or possible solution to a problem, I do not take time to consider the chances of each alternative being successful.

Read each statement, and indicate the extent to which you agree or disagree with that statement, using the following alternatives:

1 = Strongly Agree
2 = Moderately Agree
3 = Slightly Agree
4 = Slightly Disagree
5 = Moderately Disagree
6 = Strongly Disagree

16. When confronted with a problem, I stop and think about it before deciding on a next step.

17. I generally go with the first good idea that comes to my mind.

18. When making a decision, I weigh the consequences of each alternative and compare them against each other.

19. When I make plans to solve a problem, I am almost certain that I can make them work.

20. I try to predict the overall result of carrying out a particular course of action.

21. When I try to think up possible solutions to a problem, I do not come up with very many alternatives.

22. In trying to solve a problem, one strategy I often use is to think of past problems that have been similar.

23. Given enough time and effort, I believe I can solve most problems that confront me.

24. When faced with a novel situation I have confidence that I can handle problems that may arise.

25. Even though I work on a problem, sometimes I feel like I am groping or wandering, and am not getting down to the real issue.

26. I make snap judgments and later regret them.

27. I trust my ability to solve new and difficult problems.

28. I have a systematic method for comparing alternatives and making decisions.

29. When I try to think of ways of handling a problem, I do not try to combine different ideas together.

30. When confronted with a problem, I do not usually examine what sort of external things in my environment may be contributing to my problem.

31. When I am confronted by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information.

Read each statement, and indicate the extent to which you agree or disagree with that statement, using the following alternatives:

1 = Strongly Agree
2 = Moderately Agree
3 = Slightly Agree
4 = Slightly Disagree
5 = Moderately Disagree
6 = Strongly Disagree

32. Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problem.

33. After making a decision, the outcome I expected usually matches the actual outcome.

34. When confronted with a problem, I am unsure of whether I can handle the situation.

35. When I become aware of a problem, one of the first things I do is to try to find out exactly what the problem is.

NOTE: Check your computer sheet, you should have made 35 responses.

UCLA Loneliness Scale

Directions: Indicate how often you feel the way described in each of the following statements. Circle one number for each statement.

Statement	Never	Rarely	Sometimes	Often
1. I feel in tune with the people around me.	1	2	3	4
2. I lack companionship.	1	2	3	4
3. There is no one I can turn to.	1	2	3	4
4. I do not feel alone.	1	2	3	4
5. I feel part of a group of friends.	1	2	3	4
6. I have a lot in common with people around me.	1	2	3	4
7. I am no longer close to anyone.	1	2	3	4
8. My interests and ideas are not shared by those around me.	1	2	3	4
9. I am an outgoing person.	1	2	3	4
10. There are people I feel close to.	1	2	3	4
11. I feel left out.	1	2	3	4
12. My social relationships are superficial.	1	2	3	4
13. No one really knows me well.	1	2	3	4
14. I feel isolated from others.	1	2	3	4
15. I can find companionship when I want it.	1	2	3	4
16. There are people who really understand me.	1	2	3	4
17. I am unhappy being so withdrawn.	1	2	3	4
18. People are around me but not with me.	1	2	3	4
19. There are people I can talk to.	1	2	3	4
20. There are people I can turn to.	1	2	3	4

Appendix J

Daily Self-Monitoring Scale   Date: _____

Instructions: For each question please circle one number.
               Feel free to include further comments. If
               you need more room use the back of the page.

1. Did you have any thoughts of suicide today? yes or no
(circle)

2. How often? 0. didn't have them
               1. one to several times
               2. approximately every hour
               3. several times an hour
               4. other---explain
    Further comments:

3. How intense were the thoughts?   0. very weak
                                          1. weak
                                          2. moderate
                                          3. strong
    Further comments:

4. How long did each thought last?
    0. brief-fleeting
    1. short duration-several minutes
    2. longer-an hour or more
    3. almost continuous
    Further comments:

5. What were the situations or feelings set off the
suicidal thoughts?

Situations:

Feelings:

Appendix K

Name: _____

Date: _____

Instructions: Please rate the following situations as to how stressful they have been for you over the past week, and whether they have occurred.

1.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Not at
all
Stressful

Moderately
Stressful

Extremely
Stressful

2.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Not at
all
Stressful

Moderately
Stressful

Extremely
Stressful

3.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Not at
all
Stressful

Moderately
Stressful

Extremely
Stressful

4.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Not at
all
Stressful

Moderately
Stressful

Extremely
Stressful

5.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Not at
all
Stressful

Moderately
Stressful

Extremely
Stressful

Appendix L

Rating of Treatment Rationale--Midtreatment

We are again interested in obtaining your impressions
about the treatment procedure at this time. Please answer
each question below as honestly and openly as possible.
Circle the number which best reflects your feelings right
now.

How logical does this type of treatment seem to you in
terms of decreasing suicidal thoughts?

```
   1     2     3     4     5     6     7     8     9
not at all                                      very
logical                                       logical
```

How confident are you that this treatment will be
successful in reducing your suicidal thoughts?

```
   1     2     3     4     5     6     7     8     9
not at all                                      very
successful                                  successful
```

How confident would you be in recommending this
treatment to a friend with suicidal thoughts?

```
   1     2     3     4     5     6     7     8     9
not at all                                      very
confident                                    confident
```

How important do you think it is that we make this
treatment available to others who experience suicidal
thoughts?

```
   1     2     3     4     5     6     7     8     9
not at all                                      very
important                                    important
```

How successful do you believe this treatment would be in
decreasing other problems like general anxiety, depression,
etc.

```
   1     2     3     4     5     6     7     8     9
not at all                                      very
likely                                        likely
```

Please rate the level of mastery of the treatment
skills you believe you will obtain by the end of the last
treatment session.

```
   1     2     3     4     5     6     7     8     9
no mastery                                    great
at all                                      mastery
```

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Appendix M

Rating of the Therapist

We are interested in your impressions of the therapist. This type of feedback is helpful for us in understanding the effects of the treatment. Please answer each question below as honestly and as openly as possible. Circle the number which best reflects your feelings right now.

1. How competent does this therapist seem to you in the treatment of suicidal thoughts?

```
    1       2       3       4       5       6       7       8       9
not at all                                                      very
competent                                                      competent
```

2. How likeable does this therapist seem to you?

```
    1       2       3       4       5       6       7       8       9
not at all                                                      very
likeable                                                       likeable
```

3. How understanding does this therapist seem to you?

```
    1       2       3       4       5       6       7       8       9
not at all                                                      very
understanding                                              understanding
```

4. How warm does this therapist seem to you?

```
    1       2       3       4       5       6       7       8       9
not at all                                                      very
warm                                                            warm
```

5. How comfortable are you with this therapist?

```
    1       2       3       4       5       6       7       8       9
not at all                                                      very
comfortable                                                 comfortable
```

Appendix N

Posttreatment Feedback

Briefly describe what you felt you gained or did not gain from therapy?

_____

_____

_____

_____

_____

_____

_____

PROBLEM-SOLVING THERAPY

Session 1

1. Establish rapport
   a. explore the patient's reasons for seeking therapy
   b. explore the patient's perceptions regarding the major problems
   c. explore the relationship of these problems to the suicidal thoughts and the attempt

2. Explore the patient's attitude toward themselves, therapy, and therapist
   a. explore their expectations for getting help

3. Explore the frequency of suicidal thoughts and attempts and the circumstances of both, i.e. eliciting circumstances and surroundings

4. Weigh the reasons for living against the reasons for dying--list reasons for both. Do not emphasize the reasons for living over the reasons for dying, but rather list both objectively. Possible reasons for living include:
   a. effects of suicide on others
   b. previous positive events in the client's life
   c. expectations for future positive events

5. Evaluate the patient's motive for their attempt. Is it based on:
   a. a desire to leave the world
   b. a desire to change others' behavior
   c. realistic life problems for which the client can find no solutions
   d. a desire to express anger and revenge
   e. a communication of a need for help

6. Show and explain the Schedule for Self-Monitoring Suicidal Thoughts

7. Explain the treatment approach and rationale
   a. explain the treatment goals and how long treatment will last
   b. discuss how one develops a general set to recognize problems; attitude for effective problem-solving includes these principles:
      1. accepting the fact that problematic situations constitute a normal part of life and that it is possible to cope with most of these situations effectively--give client an understanding of the factors contributing to problems (e.g. changing roles, new environments, etc.)
      2. recognizing problematic situations when they occur--have client outline general areas of daily living where such situations might occur (e.g. family relationships, job situations, health, etc.) and describe the different kind of issues or conflicts which often make situations problematic (e.g. competing goals and demands, obstacles to goals) and also list common problems people encounter

3. inhibit tendency to respond "automatically" without carefully
    thinking things through--have client examine emotional reac-
    tions to his problems and teach him to look for events (cog-
    nitive and external) which may be setting off these feelings
c. assess the patient's expectation of gaining help (rating)

Session 2

1. Reiterate the goals and therapeutic rationale

2. Review the three principles involved in having an effective problem-
    solving attitude

3. Review Self-Monitoring homework

4. Review the patient's attitude toward the goals, therapist, and what
    has transpired to date

5. Training in Problem-Solving on a simulated problem--therapist takes
    active role in Sessions 2-5 and demonstrates the problem-solving
    procedures with the client less actively involved, i.e. therapist
    models stages 2-5 of this therapy during next four sessions using a
    simulated problem
    a. define all aspects of a situation in operational terms--therapist
        presents vague definition of problem and goes on to identify all
        relevant details and circumstances related to the situation and
        describes them in specific, concrete terms, including not only
        present events but also background information--both external
        events and internal events are included in the definition of the
        problem
    b. formulation of the problem--identify major goals (i.e. behavioral
        objectives, desired reinforcing events) and issues which make
        the situation a problem

Session 3

1. Review Self-Monitoring homework

2. Review how the problem was defined and formulated

3. Focus on Stage 3--Generation of Alternatives
    a. distinguish between a general strategy and specific behavior
    b. instruction in the 4 rules for "brainstorming" i.e. (1) any
        criticism of alternatives is ruled out--defer judgement until
        later stages, (2) free-wheeling is welcomed--the wilder the idea
        the better, (3) quantity is wanted, (4) combination and improvement
        are sought
    c. generate general strategies and specific behaviors for each
        solution concerning the presented problem

Session 4

1. Review Self-Monitoring homework

2. Review alternatives solutions (general strategies and specific behaviors) to the problem

3. Focus on Stage 4--training in decision-making among solutions:
   a. rough screening of a list of alternatives to eliminate any obvious inferior ones i.e. those highly unlikely or likely to have extremely negative consequences
   b. consider remaining alternatives (general strategies)--what are the possible consequences in the following categories: social, personal, short-term, long-term
   c. for each alternative, list the consequences in each category and estimate the likelihood of the occurence of consequences in 3 broad categories: highly likely, likely, unlikely
   d. assign values to various consequences: positive, neutral, negative

Session 5

1. Review Self-Monitoring homework

2. Review decision-making on general strategies which are alternatives

3. Focus on decision-making for specific behavioral alternatives--go through steps b-c-d from Session 4

4. Focus on the verification of decision--choice of the most effective course of action--therapist role plays selected strategy(s) and presents consequence of action i.e. did it solve the problem?

5. Homework assignment--client is to bring his major problem to the next session to work on as was the simulated problem

Session 6

1. Review Self-Monitoring homework

2. Review the status of the original problem(s) associated with the attempt

3. Reinterpret the suicide problem as a life problem to be dealt with

4. Instruct the client that his major problem will be focused on and client will actively go through problem-solving stages while the therapist helps him to adequately perform at each stage through Sessions 6-9

5. Focus on Problem Definition and Formulation
   a. repeat steps a. (1) & (2) from Session 2--client works on his problem

Session 7

1. Review Self-Monitoring homework

2. Review the client's definition and formulation of his problem

3. Focus on client's generation of alternatives to problem
   a. repeat steps 3. a, b, c, from Session 3

Session 8

1. Review Self-Monitoring homework

2. Review definition and formulation of problem and alternative solutions (strategies and specific behaviors)

3. Focus on decision-making among alternatives (strategies)
   a. repeat steps 3. a, b, 3, from Session 4

Session 9

1. Review Self-Monitoring homework

2. Review alternative solutions--the general strategy decided upon

3. Focus on decision-making of specific behaviors--repeat steps 3, b, c, d, from Session 4

4. Verification of decisions--roleplay solutions or try them out with significant others if possible. Does outcome observed match the client's predicted outcome?

Session 10

1. Review the Self-Monitoring homework

2. Check on the verification process

3. Reiterate the problem-solving stages and the client's progress through therapy

4. Explain how he can use the skills in everyday life to effectively deal with his problems

5. Explain life as a series of highs and lows and how problems can be expected and dealt with effectively

Appendix P
SUPPORTIVE THERAPY

Session 1

1. Establish rapport
    a. explore the patient's reasons for seeking therapy
    b. explore the patient's perceptions regarding the major problems
    c. explore the relationship of these problems to the suicidal thoughts

2. Explore the patient's attitude toward themselves, therapy, and therapists
    a. explore their expectations for getting help

3. Explore the frequency of suicidal thoughts and the surrounding circumstances

4. Getting to know one another exercise
    a. sharing personal information about background, current issues, and important significant others

5. Show and explain the Schedule for Self-Monitoring Suicidal Thoughts

6. Explain the treatment approach and rationale
    a. explain the treatment goals and how long the treatment will last
    b. discuss the universality of crises and suicidal thoughts as a response to these crises
    c. introduce communication as a way to feel connected to others
    d. ask clients to explore their own thoughts about the features of effective communication

7. Assess the patient's expectation of gaining help (rating)

Session 2

1. Reiterate the goals and therapeutic rationale

2. Review the value of communication and the features of effective communication

3. Review Self-Monitoring homework

4. Review the patient's attitude toward the goals, therapist, and what has transpired to date

5. Introduce the general topic of listening skills as a form of effective communication
    a. explore types of nonverbal messages
    b. group members share experiences with each other, paying attention to nonverbal messages

Session 3

1. Review Self-Monitoring homework

2. Review forms of nonverbal communication

3. Introduce verbal messages and their meaning for the giver and receiver
    a. define ventilation
    b. define reflection
    c. group members share their feelings about ventilation and reflection
    d. group members share their experiences paying attention to ventilation and reflection

Session 4

1. Review Self-Monitoring homework

2. Review ventilation and reflection as forms of verbal communication

3. Introduce verbal listening skills of interpretation and summarization
   a. define interpretation
   b. define summarization
   c. group members share their feelings about interpretation and summarization
   d. group members share their experiences paying attention to interpretation and summarization responses

Session 5

1. Review Self-Monitoring homework

2. Review the verbal responses of interpretation and summarization

3. Introduce complex verbal messages
   a. define conflicting feelings
   b. define "yes...but" responses
   c. group members share their feelings about complex verbal messages
   d. group members share their experiences paying attention to complex verbal messages

Session 6

1. Review Self-Monitoring homework

2. Review complex verbal messages

3. Review all types of nonverbal and verbal messages

4. Introduce how to give effective feedback
   a. define using specific behavioral statements
   b. define using "I" statements
   c. define focusing on a feature the person can change
   d. define nonjudgmental statements
   e. explore group members' feelings about giving feedback
   f. share experiences paying attention to feedback skills

Session 7

1. Review Self-Monitoring homework

2. Review how to give feedback

3. Discuss Role-Playing as a way to share experiences and find better ways to deal with them
   a. describe a role-play
   b. demonstrate a role-play

4. Encourage members to share experiences using role-playing and listening skills

Session 8

1. Review Self-Monitoring homework

2. Review the function of role-playing and listening skills

3. Group members share experiences using increasingly complex role-playing and listening skills

Session 9

1. Review Self-Monitoring homework

2. Review the function of role-playing and listening skills

3. Group members share experiences using increasingly complex role-playing and listening skills

Session 10

1. Review Self-Monitoring homework

2. Review the function of role-playing and listening skills

3. Group members share experiences using increasingly complex role-playing and listening skills

4. Explain how the skills learned in therapy can be used in everyday life to increase communcation and connectedness

5. Share feelings among the group about the treatment, ending the treatment, and other group members

Appendix Q

Multivariate Analysis of Variance (MANOVA)

Effect of Therapist Evaluation on the Main Dependent
Variables at Posttest:

Hotelling-Lawley Trace $F(7,8) = .267$, $p = .951$

Effect of Therapist Evaluation X Treatment Condition on the
Main Dependent Variables at Posttest:

Hotelling-Lawley Trace $F(7,8) = .692$, $p = .680$

Effect of Therapist Evaluation on the Main Dependent
Variables at Follow-up:

Hotelling-Lawley Trace $F(7,8) = .557$, $p = .772$

Effect of Therapist Evaluation X Treatment Condition on the
Main Dependent Variables at Follow-up:

Hotelling-Lawley Trace $F(7,8) = .456$, $p = .780$

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