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SOME COGNITIVE CONSEQUENCES OF SELF-GENERATED CONCEPTIONS CONCERNING THE CAUSES AND REMEDIES OF ONE'S MOST TROUBLESOME PSYCHOLOGICAL PROBLEM.

THE OHIO STATE UNIVERSITY, PH.D., 1978
SOME COGNITIVE CONSEQUENCES OF SELF-GENERATED CONCEPTIONS
CONCERNING THE CAUSES AND REMEDIES OF ONE'S MOST
TROUBLESOME PSYCHOLOGICAL PROBLEM

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Ralph Peter Cebulla, B.A., M.A.

*****

The Ohio State University
1978

Reading Committee:           Approved By
Herbert L. Mirels, Ph.D.        Charles C. A. Sandman, Ph.D.
J. Dennis Nolan, Ph.D.
Charles C. A. Sandman, Ph.D.

Adviser
Department of Psychology
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Words cannot express the deep feelings of esteem and appreciation I hold for my wife and her contributions to this endeavor. She served as the major rater of subjects' responses and edited and typed the entire manuscript. Her loving support, patient but vigorous counsel, and general enthusiasm softened many frustrations and transformed this effort into a truly collaborative adventure.
VITA

May 14, 1933..... Born - New York, New York

1958............. B.A., San Jose State College,
San Jose, California

1959-1960....... Graduate Assistant, Department of
Psychology, The Ohio State University,
Columbus, Ohio

1960-1961....... V.A. Clinical Intern,
Denver Veterans' Administration
Hospital, Denver, Colorado

1961-1964....... Teaching Assistant, Department of
Psychology, The Ohio State University,
Columbus, Ohio

1964............. M.A., The Ohio State University,
Columbus, Ohio

1966-1968....... Director, Upward Bound Program,
Hiram College, Hiram, Ohio

1969............. Consultant, Portage County Head Start
Program, Ravenna, Ohio

1971-1974....... Chairman, Department of Psychology,
Hiram College, Hiram, Ohio

1974-1978....... Vice President, Executive Board of the
Portage Family Counseling and Mental
Health Center, Ravenna, Ohio

1964- .......... Assistant Professor of Psychology,
Hiram College, Hiram, Ohio
PUBLICATIONS

Moot, Seward A., Cebulla, Ralph P., & Crabtree, J. Michael. "Instrumental Control and Ulceration in Rats." Journal of Comparative and Physiological Psychology, 1970, 71, 405-410. (This research was supported by a grant from the National Institute of Mental Health [MH-14104-01] awarded to the second author.)

FIELDS OF STUDY

Major Field: Clinical Psychology
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INTRODUCTION

Jerome Frank (1973) suggests that all psychological therapies promote some beneficial effect, namely in symptom relief, by the mobilization of patients' expectation of help. This expectation is mobilized by the perceived prestige, authority and power of the therapist/healer and the apparently rational procedures utilized. All therapies have some conception of the genesis of a patient's difficulties that is probably more naturalistic and usually less distressing than the views held by the patients; and all therapies utilize conceptions that make treatment procedures intelligible, at least seemingly rational, and thereby persuasive. The fact that placebos (Frank, 1973) and pseudotherapy (Marcia, Rubin, and Efran, 1969) can be beneficial attests to the crucial role expectancies play in the therapy situation. Without minimizing the important role of the therapist, it seems reasonable to expect that merely thinking about one's difficulties in terms of causes or coping strategies places one in a problem-solving framework and thereby engenders an optimism that a problem-solving orientation connotes.
The present study attempted to explore the possibility that thinking and writing about the causes of one's most troublesome psychological problem and thinking and writing about how one might overcome it would have a salutary or beneficial effect which would not be obtained by simply describing the problem. These manipulations represent an implicit analogy to psychotherapy.

There are reasons, other than the positive connotations associated with discussing one's problems in a constructive framework, to believe that attending to causal factors or coping strategies would prove beneficial. Valins and Nisbett (1971), in discussing the implications of attribution processes in the development and treatment of emotional disorders, stress that inadequacy attributions, experienced as damaging and stressful, stem from attributing one's difficulties to dispositional factors rather than situational ones. Thus, to attribute one's difficulties to static dispositions like laziness, neurosis or moodiness leads to a kind of fatalism associated with the expression, "That's the way I am." On the other hand, being induced to look at how one's difficulties began and developed historically should increase the probability of considering situational factors that were associated with or had caused one's difficulties. To associate one's difficulties with naturalistic or situational factors would seem to be less personally damaging and stressful. If one saw his
or her problem as stemming from reactions to specific situations, the logical alternatives of avoiding those situations or of changing one's reactions to them would be hopeful or reassuring.

Inasmuch as it is conceivable that some persons seeking causes for their difficulties might identify situational or causal factors that had led to behavioral reactions or traits which seemed irreversible or not amenable to change, inducing these persons to think about how they might solve their problem should produce a beneficial effect. From Bem's Self-Perception Theory or a cognitive dissonance approach, finding oneself trying to solve one's difficulties translates into believing that one's difficulties are solvable. Furthermore, engaging in that effort implies a competence and responsibility that are oppositional to many of the attributions associated with learned helplessness (Seligman, 1975), such as the belief that one's efforts do not make a difference.

Recent theoretical conceptions and experimental findings from social psychology provide further justification for this study. The relative ease with which personality dispositions have been experimentally influenced or manipulated has led to a questioning of their presumed stability and centrality. Both Gergen and Gibbs (1965) and Mirels and McPeek (1977) found that when subjects were induced to describe themselves in self-laudatory terms
their self-esteem was subsequently enhanced. Coleman (1975), by having subjects read positive or negative self-evaluative statements, was able to produce significant differences in elation-depression on multiple measures. Significantly, the effect was also obtained with characteristically elated and depressed subjects. What is of interest here is that in these studies self-esteem was manipulated by rather subtle means other than the traditional success/failure manipulation.

The major question raised by this study was whether or not the equally subtle means of inducing subjects to engage in constructive problem-solving activities with their implicit therapeutic connotations would produce a salutary effect when compared to subjects not afforded that opportunity.
METHOD

Subjects

135 undergraduate students, 102 females and 33 males, participated in this study. The subjects were drawn from 3 institutions: 20 from Kent State University in Kent, Ohio; 35 from the University of Indiana Northwest in Gary, Indiana; and 80 from the College of Charleston in Charleston, South Carolina (hereafter referred to as Kent, Gary and Charleston). Inasmuch as this study was run during summer sessions, there was a greater number of older students represented than would normally be expected; 88 subjects, or 65%, did fall in the age range of 18-23. The data for 12 additional subjects who failed to complete or only partially completed the experimental forms were discarded.

Procedure

There were four treatment conditions (outlined in Table 1), each of which was induced by differential instructions contained in one of four corresponding experimental booklets. The subjects were assigned to each of the four conditions by the following procedure: the booklets were prearranged in repeated sequences of
TABLE 1

PROCEDURAL TASKS OF THE FOUR TREATMENT CONDITIONS

<table>
<thead>
<tr>
<th>CONDITION 1</th>
<th>CONDITION 2</th>
<th>CONDITION 3</th>
<th>CONDITION 4</th>
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<tr>
<td>Problem (10 min)</td>
<td>Problem (10 min)</td>
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<td>Causes (10 min)</td>
<td>Treatment (10 min)</td>
<td>Home Town (10 min)</td>
</tr>
<tr>
<td>(Treatment)*</td>
<td>Dep. V'bles. (10 min)</td>
<td>Dep. V'bles. (10 min)</td>
<td>Dep. V'bles. (10 min)</td>
</tr>
<tr>
<td></td>
<td>(Treatment)*</td>
<td></td>
<td></td>
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*This component is not part of the formal design. It is used solely to ameliorate any distress that might result from Conditions 1, 2, and 4.
Conditions 1 through 4 and were then consecutively distributed to the students in each class.

The experiment was introduced on the cover page of each experimental booklet (Appendix, p. 33). This page described the intent of the study as attempting to learn about the kinds of personal problems which people regard as important and the ways in which they think about their problems. Anonymity was assured by asking subjects not to write their names in the booklets. Subjects were told that, if they found the task particularly discomforting, they should stop.

All subjects were requested to take ten minutes to describe in detail what they considered to be their most troublesome personal psychological problem—a problem which they saw as reflecting their own personal inadequacies or shortcomings; these instructions were so worded in order to exclude interpersonal problems that could be attributed solely to the shortcomings of others or problems arising from disagreements with others over values or judgments, such as parents not wanting their son or daughter to stay out late or own a car. Subjects were explicitly directed not to present their ideas about how the problem originated or developed (Appendix, p. 34).

Subjects in Condition 1, after completing their problem descriptions, were instructed to fill out the dependent variable measures. To minimize the possibility
that some of these subjects might be adversely affected by the lengthy focusing on their problems, they were asked to finish up by writing about how their problems might be alleviated or overcome. Thus, as in Condition 3, they too could experience the predicted ameliorating benefits of dealing with their problems constructively.

In Condition 2, after describing their problems, these subjects were asked to write for ten minutes about how their problems originated and developed (Appendix, p. 35) and then to fill out the dependent variable measures. Although Condition 2 was thought to be less stressful than Condition 1, the same precaution was used as in Condition 1—subjects finished up by writing about how their problems might be alleviated or overcome.

Condition 3 subjects moved from describing their problems to writing for ten minutes on how they might best alleviate or overcome them; they were asked to think of specific plans or procedures that they might utilize (Appendix, p. 36). They concluded with filling out the dependent variable measures.

Condition 4 was designed as a control. It was hypothesized that writing about the genesis of one's problem or writing about how to overcome one's problem would produce a beneficial effect that would not be obtained by merely presenting one's problem. To be able to conclude that any effect obtained was due to the specific nature of these
activities rather than to mere interpolated writing per se, these students were asked to spend ten minutes writing a description of their home town (Appendix, p. 37) after they had presented their problem and before they filled out the dependent variable measures. As with Condition 1, they were asked to complete the questionnaire with ideas on how they might remedy their problem.

With regard to subjects who would be writing after they had filled out the dependent variables, to insure that they would not go back and change their original responses, two steps were taken: (1) all subjects were instructed not to go back to a page that they had completed; and (2), for Conditions 1, 2, and 4, on the page where subjects were to write out their treatment ideas, conspicuous in the middle of the page were the same three questions of the dependent variable along with instructions to respond to them again "just to see if" their discussion of possible remedies had had any effect (Appendix, p. 42).

**Dependent Variables and Predictions**

The first two measures used in this experiment (Appendix, p. 38) related most directly to the logic of the study and had the most straightforward predictive implications. If conceptualizing one's problem in terms of etiology or remedy were to have a beneficial psychological effect, one would expect that subjects who did this
conceptualizing would have a greater sense of control over their problem and a higher expectation that it would improve than subjects who did not have the opportunity to engage in such activity. The following two questions, each presented as an eleven-point scale, were designed to measure these effects; high scores are associated with the positive anchoring label.

"To what extent do you feel that you have control over alleviating or overcoming the problem you described?" (Anchored by "No Control" and "Complete Control.")

"How much improvement do you anticipate will occur with regard to this problem over the next year?" (Anchored by "No Improvement" and "Total Elimination of the Problem.")

It was predicted that subjects in Condition 3 would be most positive, followed by subjects in Condition 2; those in Condition 4 were predicted to be less positive still, followed by the least positive ratings from subjects in Condition 1. Subjects in the Control Condition 4 were anticipated to be more positive than those in Condition 1 inasmuch as the writing about their home town might have distracted them and lessened the impact of going directly from the presentation of their problem to these questions.

The third and last question on that page (Appendix, p. 38) was also presented as an eleven-point scale, with high scores associated with the positive anchoring label:

"To what extent do you feel responsible for the development of the problem you described?" (Anchored by "Not at all Responsible" and "Entirely Responsible.")
The issue of responsibility is both germane and interesting in light of the manipulations of this study. Psychotherapy typically seeks to alleviate the distress associated with self-blame and thus implicitly lowers the feeling of responsibility; furthermore, tracing the genesis of a problem (analogous to Condition 2) generally results in the identification of external causal factors, thus lessening one's sense of responsibility. On the other hand, psychotherapy encourages patients to take responsibility for change and thus implicitly increases their overall sense of responsibility. Perhaps as patients mobilize efforts constructively (analogous to Condition 3) and begin to cope successfully with problems that were once unmanageable, they are able to acknowledge responsibility in such a way that it is no longer debilitating. Assuming this reasoning to be sound, it was predicted that subjects in Condition 2 would assume less responsibility for the development of their problem than subjects in Condition 3. Viewing the responses of subjects in Conditions 1 and 4 as baseline, they were predicted to fall between those of subjects in Conditions 2 and 3.

The fourth and final dependent variable (Appendix, pp. 39-41) assessed the impact of the treatment conditions on mood. Since depression is one of the major symptoms associated with psychological difficulty (Zigler and Phillips, 1961), the Costello-Comrey Depression Scale
(Costello and Comrey, 1967) was selected. This scale was developed utilizing normal subjects including students and seems more appropriate for a nonclinical sample than others designed primarily for clinical populations. Depression has also been used as an independent variable to predict attribution for success and failure experiences (Klein, et al., 1976; Kuiper, 1978). In those studies, depressed subjects tended to make personal or internal attributions for failure, while non-depressed subjects gave more external attributions for failure. In this study, given the degree to which Condition 2 leads subjects to attribute their difficulties to external situational factors as opposed to internal dispositional ones, it was predicted that subjects in Condition 2 would be less depressed than those in Conditions 1 and 4. It was further predicted that subjects in Condition 3, to the extent that their plans entailed transforming negative dispositional traits to positive ones or to the extent that they tried to alter their external situations, would be least depressed.

**Design**

The procedures described above established a 4(Treatment) X 2(Sex) X 3(Institution) factorial design.
RESULTS

A three-way (Treatment X Sex X Institution) multivariate analysis of variance with the four self-report instruments (control, improvement, responsibility, and depression) as dependent variables, summarized by Tables 4 and 5 (Appendix, pp. 44-45), yielded the following results. The multivariate main effect of treatment was not significant, $F(3,112)=1.14$, $p>.05$. The three a priori tests across treatment levels yielded these results: the test of Condition 1 vs. 4 (the two controls) was not significant, $F(1,112)=.63$, $p>.05$; similarly, the test of the Control Conditions 1 and 4 vs. the Experimental Conditions 2 and 3 was not significant, $F(1,112)=.12$, $p>.05$; however, the test of Condition 2 vs. 3 (the experimental conditions) was significant, $F(1,112)=2.57$, $p<.05$. This finding is best understood in terms of the univariate analysis of Treatment Condition 2 vs. 3 on the dependent measure of responsibility, $F(1,112)=5.10$, $p<.05$. The mean rating for subjects in Treatment Condition 2 on the responsibility scale was 6.34, whereas subjects in Condition 3 obtained the higher mean of 7.71, this result being in the predicted direction. Thus,
subjects who wrote about the causes of their problems saw themselves as less responsible for their difficulties than did subjects who wrote about how they might alleviate their problems. Although a Dunn's test comparing Condition 2 with the combination of Conditions 1, 3, and 4 taken together failed to reach significance, $d = 1.79, p < .10 > .05$, it is fairly close and warrants considering the relationship between Condition 2 and responsibility to be somewhat distinct from the other conditions.

Neither the multivariate main effect for sex, $F (1,112)=1.25, p > .05$, nor institution, $F (2,112)=1.31, p > .05$, reached significance. The multivariate interaction for treatment by sex also failed to reach significance, $F (3,112)=.69, p > .05$. However, a number of interactions involving institution did reach significance, but these were uninterpretable.¹

¹The multivariate interaction of sex by institution reached significance, $F (2,112)=2.12, p < .05$. In terms of univariate analysis, only the dependent measure of improvement obtained significance, $F (2,112)=3.17, p < .05$. Females at both Gary and Kent had higher mean ratings on improvement than did the males at both institutions, whereas females at Charleston obtained lower mean scores than did males there.

The multivariate interaction of treatment condition by institution did not reach significance, $F (6,112)=1.38, p > .05$. Yet, the univariate analysis of Condition 1 vs. 4 by institution on the dependent measure of depression was significant, $F (2,112)=3.20, p < .05$. Subjects in Condition 1 had lower mean depression scores (low scores are associated with depression) than did subjects in Condition 4 at both Charleston and Gary. At Kent, on the other hand, subjects in Condition 1 had higher mean scores than did
Additionally, a multivariate analysis of covariance (MANCOVA) for age as a covariate was performed. Although this analysis reached significance, $F(1,112)=3.20$, $p < .05$, it was limited to the univariate analysis on the dependent measure of improvement only. Inasmuch as no main effects nor interactions reached significance in this analysis that did not reach significance in the multivariate analysis of variance, the latter technique was utilized as previously described.

**Post Hoc Analyses**

Although Treatment Condition 2 differed from Treatment Condition 3 with respect to responsibility on the univariate analyses, no overall multivariate main effect was found nor did these two experimental conditions differ from the control conditions. Inasmuch as the predictions for the efficacy of Condition 3 for the dependent measures of control and improvement had seemed to be the most straightforward, an analysis was undertaken to try to understand these discrepant results. In reading the subjects' subjects in Condition 4.

The univariate analysis of Condition 2 vs. 3 by institution on the dependent measure of responsibility also reached significance, $F(2,112)=3.29$, $p < .05$. Subjects in Condition 2 at Gary had higher mean responsibility scores (i.e., felt more responsible for their problems) than did subjects in Condition 3. The reverse order was obtained at both Kent and Charleston, with subjects in Condition 2 having lower mean responsibility scores than those in Condition 3.
attempts to think of ways to alleviate their problems, it appeared that many had difficulty coming up with ideas other than a statement suggesting that he or she would try to reverse a negative disposition; for example, a subject complaining of a poor self-concept stated that he would try to develop a better self-concept as a solution to the problem. Some subjects who tried to cope with their problems in this manner would exclaim that they knew what they had to do, but that it had never worked in the past. Although the instructions for Condition 3 subjects asked them to write down specific plans or procedures that they might utilize to overcome their problem, their apparent inability to translate wishes or intentions into procedures, plans or behaviors might well account for the persistence of their difficulties in real life and for the attitudes reflected in their scores on the dependent measures of Condition 3. It seemed likely that if one could identify subjects whose ideas on how to alleviate their problems were concrete, detailed or specific from those whose ideas were global or merely intentional, then these differences might be reflected on the dependent measures and thereby provide a possible explanation for the lack of potency of the Condition 3 treatment manipulation; that is, subjects who were not able to think of good coping strategies might have felt less control over their problem and felt less optimistic about improvement.
One rater, without knowledge of the subjects' scores on the dependent measures, sorted the 34 subjects of Condition 3 into three groups on the basis of their ideas on how they might alleviate or overcome their problems. Those subjects who were not able to think of any concrete, specific or reasonable plan were designated Group C; those who mentioned one reasonable specific idea were placed in Group B; and those who had more than one comprised Group A. Using these three groups, a one-way analysis of variance was performed for each of the four dependent variables—control, improvement, responsibility and depression.

The analysis of variance for responsibility and depression failed to reach significance. But the analysis of variance for control was significant, $F(2, 31) = 4.38, \ p < .05$. A Newman-Keuls analysis revealed significant mean differences, $\ p < .05$, between all three subgroups: Group A had the highest mean (8.89) and was significantly higher than Group B (6.92) and Group C (5.50); Group B was significantly higher than Group C (see Table 2). The analysis of variance for improvement was also significant, $F(2, 31) = 4.97, \ p < .05$. Mean differences were significant by Newman-Keuls analysis and were also in the expected direction. Group A's mean on the improvement scale (8.33) was significantly higher, $\ p < .05$, than Group B's (6.85) and Group C's (4.58); Group B's mean was significantly higher than Group C's (see Table 3).
### Table 2

**Differences Among Means and Newman-Keuls Critical Values for ANOVA Significant F for Condition 3 Subgroups on Control**

<table>
<thead>
<tr>
<th></th>
<th>A (8.89)</th>
<th>B (6.92)</th>
<th>C (5.50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>—</td>
<td>1.97* (1.54)</td>
<td>3.39* (2.64)</td>
</tr>
<tr>
<td>B</td>
<td>—</td>
<td>—</td>
<td>1.42* (1.11)</td>
</tr>
<tr>
<td>C</td>
<td>—</td>
<td>—</td>
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</tr>
</tbody>
</table>

*P < .05

### Table 3

**Differences Among Means and Newman-Keuls Critical Values for ANOVA Significant F for Condition 3 Subgroups on Improvement**

<table>
<thead>
<tr>
<th></th>
<th>A (8.33)</th>
<th>B (6.85)</th>
<th>C (4.58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>—</td>
<td>1.48* (1.23)</td>
<td>3.75* (3.11)</td>
</tr>
<tr>
<td>B</td>
<td>—</td>
<td>—</td>
<td>2.27* (1.88)</td>
</tr>
<tr>
<td>C</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

*P < .05
To assess the reliability of the original subgroup ratings upon which this analysis is based, another rater was trained and independently sorted the same subjects. A Spearman-Brown analysis was performed and yielded $r = .91$. This value is sufficiently high to warrant confidence in the reliability of the ratings.

To get a sense of the range and types of problems that subjects wrote about, see Appendix K (pp. 46-48).
DISCUSSION

Overall, these findings do not support the major hypotheses of the study. The salutary effects presumed to be associated with describing the causes of one's psychological problems or thinking of ways to overcome them did not materialize in subjects' ratings of control, improvement or depression. These ratings were not significantly different from those of subjects who simply described their problems nor from those who had the interpolated task of describing their home town.

The one result that did provide support for the expected relationship between treatment conditions and responsibility was the finding that focusing on the causes of one's difficulties results in feeling less responsible for them. It was hypothesized that subjects in Condition 2 would assume significantly less responsibility than those in Condition 3, with subjects in Conditions 1 and 4 falling between them. These predictions were upheld by the data. It is interesting to speculate that, by analogy, these results might pertain to differences in patients' perceptions of responsibility for their symptoms or problems as a function of therapies that emphasize historical antecedents.
(e.g., psychoanalysis) from those that are more contemporaneously oriented and stress specific treatment techniques or procedures (e.g., behavior modification and learning theory approaches). This has certainly been one of Mowrer's concerns (1960, 1961) and has led him to indict psychoanalysis and learning theory approaches which emphasize the causes of mental illness and symptoms as residing outside of individual choice and intention. Mowrer contends that such approaches foster, at best, amoral attitudes and, at worst, psychopathic ones. The issues concerning the relationship between mental illness, psychotherapy and responsibility are important but complex and entail philosophical and political considerations beyond the scope of this paper. But the finding of this study, that people assume more responsibility for their problems when engaged in trying to overcome them than when focusing on their causes, does attest to the truism that people generally feel responsible only for things that they can do something about. Paradoxically, it could be true that the therapies which are most deterministic yet most explicit about treatment procedures foster the greatest sense of responsibility. It is also likely that when responsibility leads to extreme anxiety, guilt and self-recrimination, it can be therapeutic to explore external causes for one's difficulties or "normal" explanations for behavior presumed to be "abnormal," thus mitigating damaging dispositional
attributions. The possibility of manipulating attributions for therapeutic effects has been examined by Brehm (1976) and Valins and Nisbett (1972) and represents recent efforts to suggest fruitful applications of social psychology to clinical practice.

The significant interactions of institution by sex on improvement, of institution by Condition 1 vs. 4 on depression, and of institution by Condition 2 vs. 3 on responsibility are difficult to interpret. Presumably they represent regional as well as institutional differences. This investigator's lack of knowledge of these factors would make the most conservative interpretations unbearably speculative.

Attempts to account for negative results also entail speculation inasmuch as one is never sure whether the rationale or theory is in error or whether the specific tests of the hypotheses were deficient. The exercise, however, is potentially fruitful, not only to clarify one's thinking in light of feedback, but perhaps also to formulate further empirical investigation that might ultimately provide a better grasp of the phenomena under question.

The failure of the treatment conditions to significantly affect mood or depression scores might best be understood by comparing the differences between this study and those where mood and/or self-enhancement were successfully manipulated. Coleman (1975) obtained significant
differences in elation and depression by inducing subjects to read prepared sets of positive or negative self-
evaluative statements (e.g., "I am a likeable person." or, "I can't seem to do anything right.") and by coaching them to role-play the way the person who produced such statements might have felt. Characteristically elated and depressed subjects were indeed able to take on the opposite mood states that had been assigned to them. In the present study, such externally provided cognitions and coaching cues were absent; hence, whatever demand characteristics existed were minimal and implicit in the nature of the treatment conditions themselves. These proved insufficient to alter depression scores. In a study by Mirels and McPeek (1977), subjects were induced to describe themselves in self-laudatory terms and, as a consequence, rated themselves more favorably on personality dimensions than did subjects who wrote in support of social propositions. The authors interpret these results in terms of "cognitive response analysis" (Greenwald, 1969, 1970). Moreover, Mirels and McPeek characterize this self-enhancement as reflecting self-esteem, as do Gergen and Gibbs (1965) in a similar study. It should be stressed that the instruments measuring self-enhancement or self-esteem are much different from the depression scale used in the present study. One might question whether the personal involvement associated with rating oneself as to agreeableness is comparable to
responding to such questions as whether or not life is worth living. In other words, the somewhat more clinical or serious nature of the depression scale might make it less amenable to manipulation, particularly when demand characteristics are minimal or when success/failure treatments are absent.

Noteworthy was the lack of effect of the treatment conditions on the dependent variables of control and improvement. Perhaps it was unrealistic to expect subjects to think creatively or productively about causes and remedies for their most troublesome psychological problems in the short time allotted them. Many subjects described problems that had persisted over time, despite many efforts to overcome them. Furthermore, as noted, many subjects were unable to reconstrue their difficulties in different or more constructive terms and resorted to what Kelly (1955) has called "slot rattling," i.e., moving from one end of a dimension to its opposite; for example, one subject attributed her difficulties to her being too passive and wrote that she would overcome this problem "by being more aggressive." Unfortunately it is often the case that construing the problem in terms of the dimension in question (e.g., passiveness-aggressiveness) is either the cause of the difficulty or, certainly, not the most useful way to assess the nature of the problem.
Inasmuch as Treatment Condition 3 was hypothesized to induce the greatest sense of control and improvement, we sought to learn whether subjects who were at least able to think of specific or workable solutions would rate themselves higher on control and improvement than those who did not do as well. The results of this post hoc analysis proved significant. It was surprising that even with the relatively global and unrefined rating criteria, subjects designated Group B (those who were able to think of one concrete idea) had significantly higher scores than those who did not formulate any ideas at all. These findings are understandable in common sense terms and also relate in an interesting way to the theoretical formulations used to explain attitudinal advocacy and forced compliance (Festinger, 1957; Bem, 1967, 1972; Greenwald, 1969, 1970). Though they may differ with respect to why attitude shifts occur, most attitudinal advocacy procedures are based on the assumption that there is "something" to be advocated, whether it be arguments, positions or behaviors; these are either induced, assigned or improvised; and when subjects are asked to improvise, say, arguments or attitudinal positions, it is usually with respect to a topic of general interest and knowledge so that most subjects are able to formulate at least reasonable, if not compelling, arguments. This was not the case for many of our subjects.
It would be fruitful to contrast our study again with Mirels and McPeek's study, not only because of their similarities and differences, but especially because Mirels and McPeek interpret their findings within a post-advocacy self-enhancement framework and argue for its relevance to therapeutic effects, which is of course what we are exploring by means of our analogues of therapy conditions. In both studies, externally provided materials were absent and demand characteristics minimal. However, our subjects had difficulty improvising positions, or remedies, from which optimism or enhanced feelings of their own capabilities to control or improve their situations could have been obtained; whereas the Mirels, McPeek subjects had little difficulty improvising self-laudatory positions which subsequently produced a self-advocacy effect. Equally important is the fact that, in their study, positive attitudes toward self were made salient by the experimental manipulation, whereas in our study negative attitudes toward self were made salient by having subjects emphasize psychological problems that reflected their own personal failings and inadequacies. Hence, their cognitions, if they were to be therapeutic or self-enhancing, would have to have been considerably more potent than they were in order to offset the negative attitudes initially engendered.
On the other hand, those subjects in the post hoc groups A and B were at least minimally successful in improvising therapeutic plans or procedures (arguments?) and were subsequently affected by them in salutary (self-enhancing?) ways. Had more subjects, when left to their own resources, been able to accomplish this, it is plausible that a significant treatment effect might have been obtained.

Given the difficulty that so many of our subjects had in generating specific, reasonable plans for alleviating or overcoming their problems, and given also their strikingly naive and often inept constructions of those problems, one rather general and straightforward implication can be drawn from this study. That is, there appear to be limits to working out one's problems effectively by oneself without persuasive suggestions, inputs or advice from others, including the helping professionals, or from other outside resources, such as special television programs and self-help books.
This study explored the possibility that thinking and writing about the causes of one's most troublesome psychological problem and thinking and writing about how one might overcome it would have a salutary or beneficial effect which would not be obtained by simply describing the problem. Male and female undergraduates from three educational institutions served as subjects and were arbitrarily assigned to one of four treatment conditions.

All subjects were requested to take ten minutes to write about their most troublesome psychological problem, one that was seen as a reflection of their own inadequacies or shortcomings. Subjects assigned to Condition 2 were then asked to write for ten minutes about how their problem was caused or had developed, while Condition 3 subjects spent the same amount of time writing about how they might alleviate or overcome their difficulty. Conditions 1 and 4 were controls. Condition 1 subjects, after describing their psychological problem, proceeded directly to filling out the dependent variable measures. Group 4 subjects, an additional control condition, wrote for ten minutes describing
their home town, a task interpolated between describing their problem and responding to the dependent variable measures. The above procedure established a 4(Treatment) X 2(Sex) X 3(Institution) factorial design.

The subjects' attitudes toward their problems were operationalized by three eleven-point scales measuring: (1) the degree to which subjects felt they had control over their problem, (2) the degree to which they expected to overcome their problem within a year, and (3) the degree to which they felt responsible for their problem. A fourth dependent measure was the Costello-Comrey Depression Scale, selected to assess whether any of the treatment conditions differentially affected mood.

A multivariate analysis of variance was performed and yielded no overall main effects. But Condition 2 did differ from Condition 3 with respect to responsibility on the univariate analysis. As predicted, subjects in Condition 2 felt less responsible for their problems than did subjects in Condition 3, who focused on how to overcome their problems. This result was consistent with the rationale that tracing the genesis of a problem (as in Condition 2) generally results in the identification of external causal factors and hence lessens one's sense of responsibility, whereas trying to overcome one's problem (analogous to Condition 3) should engender a sense of responsibility, for one is more likely to feel responsible for situations
when one believes he or she can do something about them.

A post hoc analysis was performed to try to understand why, contrary to our prediction, Condition 3 was not significantly different from the other treatment groups on control and improvement. Subjects in that group were classified into three subgroups on the basis of their ability or lack thereof to formulate detailed and reasonable ways to overcome their problem. An analysis of variance on these groups yielded significant differences for control and improvement. The more successfully subjects were able to think of remedies for their problems, the higher their scores on control and improvement. These results were discussed within the framework of a post-advocacy self-enhancement formulation and were interpreted as providing a plausible explanation for why significant treatment effects were not obtained for the dependent measures of control and improvement.
BIBLIOGRAPHY


APPENDIX A

(Descriptive, Instructional Cover Page
For the Experimental Booklets)

SEX_________________

AGE_________________

This questionnaire is part of a systematic effort to learn about the kinds of personal problems which people regard as important, and about the ways in which people think about their problems.

In the questionnaire you will be asked to describe your most troublesome personal psychological problem in detail. You will then be asked to give some of your reflections about it.

Although responses to the questionnaire are completely anonymous, you may feel a certain amount of discomfort when writing about matters of this sort. However, you may also discover that writing about a personal problem helps you to clarify it for yourself.

Please regard your participation as completely voluntary. Should you find that working on the questionnaire makes you feel particularly uncomfortable, feel free to return the booklet at any time. If you agree to complete the questionnaire, work carefully and thoughtfully.

Do not write your name anywhere in the booklet.

Try to spend the allotted time suggested for each question and work your way through the booklet. Do not start a new page until you have finished the one you are already working on. Once you have started a new page, do not return to any of the previous ones.

Thank you.

You may begin.
APPENDIX B

(Instructions to Describe the Psychological Problem)

Take ten minutes to give a detailed description of your most troublesome personal psychological problem -- a problem which you see as a reflection of your own inadequacies or shortcomings. Do not present your ideas about how the problem originated or developed. At this point in the booklet, simply describe your problem in as much detail as you can; try to mention a number of specific instances or circumstances where this problem has occurred, how it has bothered you, and how you have felt at the time. Use the space below and the reverse side of this page and, if necessary, the following blank sheet.
APPENDIX C

(Instructions to Present Causes of the Problem
[Treatment Condition 2])

Now take ten minutes to present, in as much detail as you can, your ideas about how your problem originated and developed. Use both sides of this page and the next blank sheet of paper as needed.
APPENDIX D

(Instructions to Describe Ways to Overcome the Problem [Treatment Condition 3])

Now take ten minutes to present, in as much detail as you can, your ideas about how your problem might best be alleviated or overcome; try to think of specific plans or procedures that you might utilize. Use both sides of this page and the next blank sheet of paper as needed.
APPENDIX E

(Instructions to Describe One's Home Town [Control Condition 4])

Now take ten minutes to describe your home town. Particularly try to identify what is unique about it, being as objective as you can. Use both sides of this page and the next blank sheet of paper as needed.
APPENDIX F

(Dependent Variable Measures: Control, Improvement, and Responsibility Scales)

Please answer the following three questions by placing an X over the dash that best represents your feeling about your problem. For example, on the first question referring to the degree of control you feel you have over alleviating or overcoming your problem, if you feel you have no control or almost no control, you would place an X over a dash close to the NO CONTROL label; if you see yourself as having complete control or almost complete control, your X would be over a dash close to the COMPLETE CONTROL label; if you feel you have moderate control, your X would be over a dash somewhere in the middle (the exact midpoint is marked by a dot).

To what extent do you feel that you have control over alleviating or overcoming the problem you described?

NO CONTROL __ __ __ __ __ __ __ __ __ COMPLETE
CONTROL

How much improvement do you anticipate will occur with regard to this problem over the next year?

NO IMPROVEMENT __ __ __ __ __ __ __ __ __ TOTAL ELIMINATION OF THE
PROBLEM

To what extent do you feel responsible for the development of the problem you described?

NOT AT ALL __ __ __ __ __ __ __ __ __ ENTIRELY
RESPONSIBLE
RESPONSIBLE
APPENDIX G

(Dependent Variable Measure: The Costello-Comrey Depression Scale)

Please fill out the following questionnaire (continued on the next two pages) as honestly as you can. Indicate your choice on each item by checking the alternative that best represents your feeling.

1. I feel that life is worthwhile.
   ─── absolutely
   ─── very definitely
   ─── definitely
   ─── probably
   ─── possibly
   ─── probably not
   ─── definitely not
   ─── very definitely not
   ─── absolutely not

2. When I wake up in the morning I expect to have a miserable day.
   ─── always
   ─── almost always
   ─── very frequently
   ─── frequently
   ─── fairly often
   ─── occasionally
   ─── rarely
   ─── almost never
   ─── never

3. I wish I were never born.
   ─── absolutely
   ─── very definitely
   ─── definitely
   ─── probably
   ─── possibly
   ─── probably not
   ─── definitely not
   ─── very definitely not
   ─── absolutely not

4. I feel that there is more disappointment in life than satisfaction.
   ─── absolutely
   ─── very definitely
   ─── definitely
   ─── probably
   ─── possibly
   ─── probably not
   ─── definitely not
   ─── very definitely not
   ─── absolutely not
<table>
<thead>
<tr>
<th></th>
<th>5. I want to run away from everything.</th>
<th>8. Living is a wonderful adventure for me.</th>
</tr>
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<tr>
<td>□</td>
<td>always</td>
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<tr>
<td>□</td>
<td>very frequently</td>
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</tr>
<tr>
<td>□</td>
<td>frequently</td>
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</tr>
<tr>
<td>□</td>
<td>fairly often</td>
<td>□ fairly often</td>
</tr>
<tr>
<td>□</td>
<td>occasionally</td>
<td>□ occasionally</td>
</tr>
<tr>
<td>□</td>
<td>rarely</td>
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</tr>
<tr>
<td>□</td>
<td>almost never</td>
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<table>
<thead>
<tr>
<th></th>
<th>6. My future looks hopeful and promising.</th>
<th>9. I am a happy person.</th>
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<tr>
<td>□</td>
<td>absolutely</td>
<td>□ always</td>
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<td>very definitely</td>
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<td>very definitely not</td>
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<td>□</td>
<td>absolutely not</td>
<td>□ never</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>7. When I get up in the morning I expect to have an interesting day.</th>
<th>10. Things have worked out well for me.</th>
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<tr>
<td>□</td>
<td>always</td>
<td>□ absolutely</td>
</tr>
<tr>
<td>□</td>
<td>almost always</td>
<td>□ very definitely</td>
</tr>
<tr>
<td>□</td>
<td>very frequently</td>
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<td>□ very definitely not</td>
</tr>
<tr>
<td>□</td>
<td>never</td>
<td>□ absolutely not</td>
</tr>
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</table>
11. The future looks so gloomy that I wonder if I should go on.

always
almost always
very frequently
frequently
fairly often
occasionally
rarely
almost never
never

12. I feel that life is drudgery and boredom.

always
almost always
very frequently
frequently
fairly often
occasionally
rarely
almost never
never

13. I feel blue and depressed.

always
almost always
very frequently
frequently
fairly often
occasionally
rarely
almost never
never

14. When I look back I think life has been good to me.

absolutely
very definitely
definitely
probably
possibly
probably not
definitely not
very definitely not
absolutely not


APPENDIX H

(Instructions to Describe Ways to Overcome the Problem and Repeated Scales for Control, Improvement and Responsibility [A Precautionary Measure for Conditions 1, 2, and 4])

Take ten minutes to write down your ideas about how your problem might best be alleviated or overcome. In light of the way you feel about these ideas, you might want to reevaluate your responses to three questions repeated on the following page.¹ If so, fill them out again. If not, leave them blank and proceed to the last page.²

To what extent do you feel that you have control over alleviating or overcoming the problem you described?

NO CONTROL __ __ __ __ __ __ __ __ __ __ COMPLETE

How much improvement do you anticipate will occur with regard to this problem over the next year?

NO IMPROVEMENT __ __ __ __ __ __ __ __ __ __ TOTAL ELIMINATION OF THE PROBLEM

To what extent do you feel responsible for the development of the problem you described?

NOT AT ALL __ __ __ __ __ __ __ __ __ __ ENTIRELY RESPONSIBLE

¹These scales appear here rather than, as in the subjects' booklets, on a subsequent page.

²The last page simply expressed the researcher's appreciation for the subjects' participation and candor and instructed them to turn in their booklets.
APPENDIX I

(Table 4.--MANOVA Summary Table)
### TABLE 4. -- MANOVA SUMMARY TABLE

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<th>Source</th>
<th>df</th>
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<th>Improvement</th>
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*E < .05
APPENDIX J

TABLE 5.—NUMBER OF SUBJECTS IN EACH OF THE CELLS FOR THE MULTIVARIATE ANALYSIS OF VARIANCE

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<tr>
<th>Institution</th>
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<th>Condition 2 (Causes)</th>
<th>Condition 3 (Remedies)</th>
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<td>Males</td>
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<td>9</td>
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<td>3</td>
<td>18</td>
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</tbody>
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(Female aged 20)  "My biggest problem is feeling like I'm not as good as most other people; that I'm inferior to them. I find myself sometimes just waiting for my friends to stop being friends with me because I'm not a very neat person. I never have any ideas of my own, they are always the ones I've just accepted from other people because I felt theirs was better than my own. I end up going places I don't want to go or doing things I don't enjoy because I'm afraid that if I refuse, I won't have any friends anymore; or my friends will not want to go anywhere I suggest. I feel like others have more friends than I and can do things better than I. Therefore I try to really push myself to excel in the few things I'm good at. The only problem is that I can't ever be happy with my achievements because I did them and that's not very good."

(Female aged 24)  "My most troublesome personal psychological problem is sex. I have much guilt regarding this part of my life—I am single and pre-marital sex is against the morals I was brought up with. I do not feel comfortable sleeping with another person; I can't get emotionally involved in the sexual act—I can't take that aspect of my life seriously. Not only can I not deal with it now, but I was married at 18 and still could not enjoy sex with my husband. I just couldn't deal with it psychologically. I couldn't justify taking part in sexual intercourse."

(Male aged 22)  "I see my biggest problem as not having enough self-confidence. I have forfeited many a promising position because of my lack of faith in myself. I have had job interviews and job offerings that I have turned down because I didn't think I could present myself in a satisfying manner. These kinds of situations can be most frustrating and depressing. In dealing with women, I have passed up many a fine looking lady because I figured
that I wasn't good enough for her. These kinds of situations bring about less interaction with people."

(Female aged 22) "I feel like I am never going to get out of school and this really bothers me. The harder I study the worse I do. I have been in school for five years and if I don't get my GPR up I will not get out this semester. People kid me about it and I kid about it but deep down it really does bother me. The problem is not in my major but in the required subjects. I feel like I have been here longer than anyone else.

"It really bothers me when I see all my friends getting out of school and here I am still in school. I really get upset when I see this. I feel I am just plain dumb."

(Female aged 27) "I am very dependent on family and friends, especially my husband. This tendency shows up in everyday circumstances for example studying for a test, often I depend on my husband to get me through especially if it is a course in which I have a weakness math or statistics for example. Also I feel this problem of dependency manifests itself in my inability to fail to get certain tasks or jobs done. It is something I am aware of and I realize quite often I want someone to help me with something or to do the job for me. It seems to be a vicious circle because of my dependence on others I often feel incapable of dealing with certain problems"

(Male aged 27) "Violence: I often think about ways of doing violent things to people I don't like. The types of things I feel like doing, I learned in the Marine Corps. I think about often, say about 5-10 times a day. I don't even think about these people as human beings. In particular in this regard, some of the crime in this area such as purse snatchings, muggings, etc., I am particularly disgusted by the people and I "dream" up ways of just destroying them. This disgust carries over to people I don't like that I know.

"This problem forms a conflict for me because of my white middle class, protestant upbringing. I'm not supposed to think this way. Then there was the Marine Corps, whose job it was to teach me to kill. They did their job well.

"I think this is my most troublesome problem because I find myself thinking about this type of violence when I should be or am doing something else. I try to think the way today's society says I should but I often don't."
(Female aged 21) "My most troublesome problem is my being overweight. I know for a fact that my weight problem has caused me many problems. I'm always self conscious about everything I do. I can never go into a clothing store and buy what I want. I'm always in the stout woman department or settling for the old leftovers. I'm usually afraid to participate in group activities in fear that I'll be stared at or laughed at. I always notice things like me being the biggest in the group, or being less active. I usually feel pity for myself, less important than others and down right FAT!"

(Female aged 18) "My biggest problem is that I have a fear of talking in front of people. I do not have enough self confidence. This problem has limited me in many ways. For instance, I will not sign up for a course here at the college if it requires alot of oral participation. I have trouble when I am being interviewed for a job. I will never be able to go into many of the professions that I have found interesting because of this problem. "When I try to speak to a group of people my face and neck become flushed. I cannot make eye contact with anyone in the audience. I laugh alot because I am uncomfortable. Sometimes my mind goes completely blank. I stutter."

(Male aged 22) "Fear of the dark and being alone. I don't like to sleep in a house were there is NO other people in it. Next, when I walk down any street at night I alway look around me all the way to were I am going. I also think people are going to rob me or my house."

(Male aged 25) "My most trouble-some problem seems to be interacting with strangers. For example I currently am playing in a band. When I first began playing with this band I felt really awkward in trying to get my point across about how I felt about what we were attempting to do. I feel that this inability to relate to others sometimes holds me back from realizing my full potential capacity as a human being."

(Female aged 31) "Lonliness--I do not feel that I am able to cope at all with these feelings. The situation gets worse with age. I have attended cocktail parties and teas with several people in the immediate area and have felt overwhelmingly alone. I tend also to ward off situations of extreme personal contact with others, unless they are of a professional nature."