This study examined the self-statements of dysphoric (n=13) and nondysphoric subjects (n=15) during an interpersonal problem solving task. After completing the Problem Solving Inventory (PSI), a 32-item self-report questionnaire, the subjects were individually shown a brief videotape depicting an interpersonal problem and asked to solve the problem while thinking aloud. The frequencies of five self-statement categories were recorded: (1) task relevant; (2) task-irrelevant; (3) emotion-focused; (4) problem focused; and (5) periods of silence. Although the dysphoric subjects rated themselves more negatively on the PSI with regard to their problem-solving abilities, they were able to generate as many effective solutions as the nondysphoric subjects. During problem solving, those with dysphoria used less problem-focused statements and more emotion-focused statements. The findings suggest that in treating dysphoric individuals, particularly with the goal of improving problem-solving skills, one should examine their self-statements and appraisals in relation to stressful life events. Proper training in the identification and usage of facilitating self-statements should also be incorporated into a treatment program as a means to promote more effective interpersonal problem-solving.

(RJM)
Think Aloud Statements and Solutions
of Dysphoric Persons on a
Social Problem-Solving Task

Vicki D. Mayo        Junko Tanaka-Matsumi
Abstract

The purpose of the present study was to examine the self-statements of dysphoric (n=13) and nondysphoric subjects (n=15) during an interpersonal problem solving task. After completing the Problem Solving Inventory (PSI; Heppner & Petersen, 1982), subjects were individually shown a brief videotape depicting an interpersonal problem and asked to solve the problem while thinking aloud. Frequencies of five self-statement categories were recorded: task-relevant; task-irrelevant; emotion-focused; problem-focused; and periods of silence. Although the dysphoric subjects rated themselves more negatively on the PSI with regard to their problem-solving abilities, they were actually able to generate as many effective solutions as the nondysphoric subjects. During problem-solving, the dysphoric subjects, however, used less problem-focused statements and more emotion-focused statements. The frequencies of task-irrelevant and emotion-focused self-statements correlated negatively with the socially-validated score of solution effectiveness.

Key Words: 1. Think aloud procedure
2. Social problem solving
3. Dysphoria
4. Depression
5. Self-Statement
Think Aloud Statements and Solutions of Dysphoric Persons on a Social Problem-Solving Task

It has been reported that there is a general excess of stressful life events prior to the onset of depression (Paykel, Myers, Dienelt, Klerman, Lindenthal, & Pepper, 1969). In particular, events that are regarded as undesirable (e.g., demotions, being fired) or uncontrollable, and events involving losses or exits from the social field (e.g., deaths, divorce) have been found to strongly correlate with the development of depression (Hammen & Mayol, 1982; Lloyd, 1980; Thoits, 1983). However, it is still unclear as to why some individuals do not become depressed after a stressful life event or why depression develops in other individuals under mild stress conditions.

The term "depressed" has been used in previous studies examining social problem-solving and coping to describe the subjects. While some have employed actual clinical samples (e.g., Billings, Cronkite, & Moos, 1983; Marx, Williams, & Claridge, 1992; Mitchell, Cronkite, & Moos, 1983; Nezu, 1986), other studies have defined subjects on the basis of self-report measures of depression such as the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) with various cutoff scores (e.g., Nezu, 1985; Nezu & Ronan, 1985, 1987, 1988; Zemore & Dell, 1983). In reviewing the literature in this article, the term "depressed" is used to preserve the label used by the original authors. In the present study, however, following the recommendation of Kendall, Hollon, Beck, Hammon,
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and Ingram (1987), the target subjects are referred to as "dysphoric" instead of "depressed" based on their scores on the BDI and Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960).

One factor that has been found to interact with life stress is the individual's social problem-solving ability (Nezu, 1987). According to D'Zurilla and Goldfried (1971), social problem-solving is defined as a type of problem-solving that occurs in the social environment where the emphasis is placed on the individual's learned response to a naturally occurring life situation. Social competence is both facilitated and maintained by effective social problem-solving and is regarded as an important set of skills for dealing with stressful life events (Lewinsohn, 1974; Lewinsohn, Biglan, & Zeiss, 1976).

Nezu and Ronan (1985) examined the moderating effects of social problem-solving on negative life stress and on depressed mood. By using path analysis, they demonstrated that negative life stressors influence self-report of depression both directly and indirectly via the level of problem-solving abilities. Moreover, problem-solving ability directly influences the severity of depression.

It has been reported that ineffective social problem-solvers, as assessed by a self-report measure, the Problem Solving Inventory (PSI; Heppner & Petersen, 1982), report significantly higher levels of depression than effective problem-solvers among normal college populations (Nezu, 1985;
Moreover, depressed persons have been found to be less skillful than nondepressed persons in solving interpersonal problems (Gotlib & Asárnow, 1979; Marx, Williams, & Claridge, 1992; Zemore & Dell, 1983), as well as exhibiting significant difficulties in both to generate alternatives and making relevant decisions concerning interpersonal problems (Nezu & Ronan, 1987).

In social problem-solving, individuals attempt to alleviate a problematic situation by focusing on the situation itself or by using various emotional strategies. The former attempt is defined as problem-focused coping, while the latter has been defined as emotion-focused coping (Billing & Moos, 1985; Folkman & Lazarus, 1980). Problem-focused coping includes information seeking and taking specific actions such as bargaining or compromising when confronted with a problem. Emotion-focused coping includes emotional discharge, seeking emotional support, and bolstering morale. It has been reported that depressed and nondepressed individuals may employ one form of coping with greater frequency (Billing & Moos, 1982). Those who exhibit less severe symptoms of depression are likely to engage in more problem-focused coping, while the reliance on emotion-focused and avoidance responses characterize individuals who display high levels of depression (Billings & Moos, 1981; Folkman & Lazarus, 1980). Failure to use problem-focused responses may have long-term negative psychological consequences (Mitchell, Cronkite, & Moos, 1983).
All of the studies that have examined group differences in actual problem-solving skills and appraisals of one’s skills have used self-report outcome measures such as the Means-Ends Problem Solving Test (MEPS; Platt & Spivack, 1975) and the Problem Solving Inventory (PSI). These measures assess the actual end-products of problem-solving including the number of solutions generated, the rated effectiveness of their solutions, and the overall appraisal of their problem-solving skills. Few studies have empirically examined the process of problem-solving by the depressed individuals.

Think aloud, a recording procedure, involves the audiotaping and subsequent analysis of subjects’ self-statements during task execution. Samples of subjects’ self-statements are collected without external probes and leading questions and by instructions that avoid prompting the subjects to give explanations for their behavior (Meichenbaum & Cameron, 1981). The recorded tapes are unitized to separate each unit of thought for further analysis.

Think aloud procedure has been used to assess self-statements of math anxious students (Blackwell, Galassi, & Watson, 1985), gifted high school students (Kempton, 1984), expert and novice shoplifters (Weaver & Carroll, 1985), subjects during cold pressor challenges (Heiden, Larkin, & Knowlton, 1991), and subjects during the visualization of a social rejection scene (Craighead, Kimball, & Rehak, 1979). Very few studies have used think aloud procedure with depressed subjects (Conway, Howell, & Giannopoulos, 1991). The present study extends
the previous work which used self-report measures of problem solving by examining self-statements subjects use during an interpersonal task through a think aloud procedure.

The following hypotheses were advanced: In comparison to the nondysphoric subjects, the dysphoric subjects would view themselves as poorer problem-solvers. In actual problem-solving, they would use more emotion-focused and task-irrelevant self-statements and fewer problem-focused and task-relevant self-statements. The dysphoric subjects would also generate fewer and less effective solutions. They would generate more emotion-focused solutions and less problem-focused solutions than the nondysphoric subjects.

Method

Subjects

The subjects were 28 undergraduate students enrolled in introductory psychology courses. The sample comprised of 13 subjects (11 females and two males) in the dysphoric group and 15 subjects (eight females and seven males) in the nondysphoric group.

Approximately 200 students completed the BDI. Thirty seven students who met the screening criteria by scoring a 13 or higher, or below a 5 were later contacted to participate in the study. Out of the 37 students, 28 agreed to participate. Course credit and a five dollar payment were given to each subject.

The BDI was re-administered to all the subjects. In addition, the Hamilton Rating Scale for Depression (HRSD), a
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A semi-structured interview, was administered to those who scored 13 or more on the BDI. Subjects who scored 13 or higher on the BDI and 15 or higher on the HRSD were assigned to the dysphoric group (Mean BDI = 20.90, Range = 13-37; Mean HRSD = 18.50, Range = 15-25). Those whose BDI scores fell below 5 were assigned to the nondysphoric group (Mean BDI = 2.30; Range = 0-5). As expected, there was a significant difference between dysphoric and nondysphoric subjects on the mean BDI scores, t(27)=10.14, p < .01.

Reliability of the HRSD was measured in terms of percent agreement by training a doctoral student in clinical psychology. The agreement for the total score was 100% between the first author and the trained student. Item-wise agreement ranged from 82% to 100%.

Stimulus Video for Interpersonal Problem-Solving

Each subject was shown a three minute video. It depicted two actors, one female and one male, having an argument about their relationship in a living room apartment setting. There were two versions of the video. Male subjects were shown a video wherein the female actress is seen telling the male actor that she wished to end their relationship. Female subjects were shown a video which had the same script but, in this version, the male actor is seen approaching the female actress about ending their relationship. This was done so that the subjects would find it easier to identify with the same sex character who was to deal with the breakup of the relationship.
Think Aloud

The main theme of the video involved a loss of a close relationship. This theme was chosen since it is well supported in the literature as one of the event types most frequently reported by the depressed (Hammen & Mayol, 1982; Thoits, 1983). Written feedback was obtained from approximately 20 undergraduate students who were not involved as subjects in order to assess the relevancy of this interpersonal problem. A majority stated, after reading the script, that they could easily identify with the characters and found the presented interpersonal problem to be a salient concern for college students.

Dependent Measures

Problem Solving Inventory (PSI; Heppner & Petersen, 1982). The PSI is a 32-item self-report questionnaire. The PSI measures a person's self-perceptions of his/her problem-solving abilities. Lower scores indicate behaviors and attitudes typically associated with "successful" problem-solving. This measure was chosen for the present study since it has been found to be a valid measure in examining differences among problem-solving attitudes and behaviors (Heppner & Petersen, 1982) as well as being strongly associated with observational ratings of problem-solving behavioral competence (Heppner, Hibel, Neal, Weinstein, & Rabinowitz, 1982).

Self-statement categories. The subjects' verbal responses during the think aloud procedure were transcribed from tape recordings by trained assistarts. Several transcripts were checked at random to verify that they were being transcribed
verbatim. The subjects’ written transcripts were unitized first. Four criteria were used to derive a unit which included the sentence structure, naturalistic phrasing, content changes, and pauses in the flow of self-statements (Henshaw, 1978).

Once the transcripts were unitized, units were classified into one of the five pre-selected self-statement categories:

1. **task-relevant statements**: Any statement that refers to a previous experience in social problem-solving (e.g., "I had this problem once"); facilitates concentration; encourages and promotes effort (e.g., "so let me think...hum"); or implies a positive attitude towards ability or self.

2. **task-irrelevant statements**: Any statement that reflects an inability to focus; implies a negative attitude towards ability or self; or represents a negative affect (e.g., "When I had this problem, I didn’t think up the right stuff to solve it").

3. **emotion-focused coping responses**: Emotional discharge; seeking emotional support; disengagement (e.g., "I would drive myself into my schoolwork to get my mind off of the problem").

4. **problem-focused coping responses**: Any statement that indicates a direct action to solve the problem (e.g., "I would try to reason with him, talk it over").

5. **silence**: Any unit that is silent for five seconds or more.

6. **other**: Units that did not meet any of the criteria among the five self-statement categories were assigned to "other" category.

The task-relevant and task-irrelevant self-statement categories were derived in light of the self-instructional
literature (Meichenbaum, 1977) and by the work of Beck and his associates (Beck, 1967, 1976; Beck, Rush, Shaw, & Emery, 1979) who contend that these types of self-statements can both facilitate or inhibit subjects in attending to the demands of a task. Both the problem-focused and emotion-focused self-statement categories were derived from studies where coping styles were examined among dysphoric and nondysphoric groups through the use of coping response scales (Billings & Moos, 1984; Folkman & Lazarus, 1980; Mitchell, Cronkite, & Moos, 1983).

Number of Solutions and Solution Effectiveness. The self-statements that represent solutions to the interpersonal problem-solving task were scored for the total number of solutions as well as their effectiveness. To score for the total number of solutions, a scoring criterion was designed which incorporated several scoring techniques outlined in the Means-Ends Problem-Solving (MEPS) manual (Platt & Spivack, 1975). Each solution that was generated had to be distinctly different in order to be scored as a single solution. Generated solutions were classified either as an emotion-focused (i.e., any solution that attempts to alleviate negative emotional reactions) or a problem-focused solution (i.e., any solution that attempts to alter the problematic situation).

Solution effectiveness was evaluated by social validation procedures. A list of 25 distinct solutions were compiled which were generated by both the dysphoric and nondysphoric groups. Twenty graduate psychology students in Clinical-School Psychology
participated as judges. After viewing the videotape, they rated the effectiveness of each of the 25 solutions according to a 4-point scale: (1) Very Ineffective, (2) Somewhat Ineffective, (3) Somewhat Effective, and (4) Very Effective. Effective reliability (Rosenthal, 1982) of the 20 judges on the 25 items assessed by the analysis of variance approach (Winer, 1971) was .95.

A mean rater score for each solution was generated. An average effectiveness score was assigned for each subject by adding all their judge-derived effectiveness scores from the solutions they produced and dividing them by the number of solution they generated.

Post-experimental questions. After completing the study, subjects were asked to rate the extent to which they felt they were able to get involved with the plot and characters depicted in the video on a 5-point scale with 1 indicating "no involvement" and 5 indicating "high levels of involvement". Subjects were also asked if they were able to identify with the presenting problem, and if they felt they had control over the outcome depicted in the video. Both of these questions were based on a yes/no format.

Training and Reliability of Independent Coders

Two coders, who were blind to the hypotheses of the study, were trained by the first author to unitize and categorize the data. Mean intercoder agreement was 90% for unitizing and 91% for categorizing the units.
Procedure

Subjects were tested individually by the first experimenter in a room containing a 13 inch television/VCR monitor and tape recording equipment. Subjects were asked to complete the BDI to insure subject classification. Dysphoric subjects, in addition, were interviewed using the HRSD. All subjects then were asked to complete the PSI. The experimenter then explained that the purpose of the study was to examine how people solve interpersonal problems. They were told that they would view a short video depicting an interpersonal problem and would be asked to think aloud while they attempted to solve the conflict.

Since generating self-statements by thinking aloud is an unusual task, subjects were given a practice task to familiarize themselves with the think aloud procedure. The practice task involved the use of Card No. 4 from the Thematic Apperception Test (TAT; Murray, 1943) which depicts a man and a woman due to its similar theme to the video presentation. Subjects were told that the individuals in the picture card were in a relationship and were now having an argument. Subjects then were asked to think aloud by saying everything that came to their mind while they worked on the problem. This was to include not just solutions, but all the connecting thoughts and feelings associated with their quest for the solutions. During the practice phase, the experimenter was present in the room to give them prompts. Subjects were prompted if they began to talk to the experimenter, if they simply stated their solutions, when content was changed.
abruptly without connecting thoughts, or if the subject paused for more than ten seconds.

After the practice task, subjects were given the experimental task, a three minute video shown on a monitor. Before showing them the video, subjects were asked to pay close attention to the concerns of the same sex character. After viewing the video, subjects were asked to identify with the same sex character and to pretend they are that person while coming up with solutions to deal with the problem. They were instructed to continue thinking aloud and report everything that came to their mind and formulate solutions during the 4-minute think aloud procedure. Subjects were given an index card with written prompts to help them through the think aloud task. Verbal responses were recorded by audiotape while the experimenter left the room. After the experiment, subjects were asked to answer three questions regarding the study. They were then debriefed.

Results

Self-Statement Categories and Outcome of Problem-Solving

Table 1 displays the mean frequencies and standard deviations of the self-statement categories for the dysphoric and nondysphoric groups. Among the five self-statement categories, both the emotion-focused and problem-focused self-statement categories revealed group differences. As predicted, the dysphoric subjects used significantly more emotion-focused statements, $t(27) = 2.82, p < .01$, and less problem-focused statements, $t(27) = -3.71, p < .001$, than the nondysphoric
subjects. There were no significant group differences for periods of silence, task-irrelevant, and task-relevant statements, all $p$s > .05.


table

To control for individual differences in the total number of self-statements, the frequencies of these self-statement categories were converted into proportion scores. Proportion scores permit a more comprehensive analysis of how the two groups used their time solving the presented interpersonal problem. Proportion scores were derived by dividing the subject's frequency of the particular self-statement category by the total number of self-statements emitted by the subject. This was then multiplied by 100 to obtain the percentage.

Figure 1 presents the mean proportion scores for each self-statement for the dysphoric and nondysphoric groups. While the nondysphoric subjects spent as much as 63% of the time using of problem-focused self-statements, the dysphoric subjects used problem-focused self-statements only 33% of the time, $t(27) = -3.77, p < .01$. In contrast, the dysphoric subjects (24%) engaged in emotion-focused self-statements six times more than the nondysphoric subjects (4%), $t(27) = 3.97, p < .01$. For all other self-statement categories, there were no significant group differences in proportion scores for task-relevant statements, $t(27) = -.09, p = .94$, task-irrelevant statements,
Table 2 presents a list of the 25 solutions generated, their solution type category (i.e., emotion-focused or problem-focused solution), frequency and rated solution effectiveness scores for the dysphoric and nondysphoric groups. Contrary to predictions, there was no difference between the dysphoric subjects ($M = 4.30, SD = 1.70$) and the nondysphoric subjects ($M = 4.90, SD = 1.40$) in the number of solutions, $t(27) = -.95, p = .35$. Similarly, the solutions generated by the dysphoric subjects ($M = 2.60, SD = .50$) were rated as effective as those of the nondysphoric subjects ($M = 2.80, SD = .30$), $t(27) = -.83, p = .42$.

Although generating equivalent number of effective solutions, the dysphoric subjects ($M = 2.0$) produced more emotion-focused solutions than the nondysphoric subjects ($M = .82$), $t(27) = 3.10, p < .01$. The dysphoric subjects ($M = 2.42$) produced significantly less problem-focused solutions than the nondysphoric subjects ($M = 4.64$), $t(27) = 2.98, p < .01$. 

To examine the relationship between the process of problem solving and its outcome, intercorrelations between the two groups
of dependent variables were examined. For the total subjects, solution effectiveness scores correlated negatively with the frequencies of task-irrelevant, $r(26) = -.48, p < .01$, and emotion-focused statements, $r(26) = -.48, p < .01$.

**Self-Appraisal of Problem-Solving Ability**

On the PSI, the dysphoric subjects ($M = 121.5, SD = 12.1$) scored significantly higher than the nondysphoric subjects ($M = 92.3, SD = 16.0$), $t(27) = 5.49, p < .001$. Higher scores are indicative of behaviors and attitudes associated with "unsuccesful" problem-solving. Moreover, the PSI scores correlated strongly with those of the BDI, $r(26) = .82, p < .01$. Further, the PSI scores correlated positively with task-irrelevant statements, $r(26) = .41, p < .05$, emotion-focused statements, $r(26) = .49, p < .01$, and negatively with problem-focused self-statements, $r(26) = -.44, p < .05$. That is, those who perceived their problem solving ability to be poor tended to use more emotion-focused statements and task-irrelevant statements and less problem-focused statements in actual problem solving. The PSI scores did not correlate significantly with the total number of solutions ($p > .05$), or solution effectiveness scores ($p > .05$).

**Discussion**

In the present study the use of a think aloud procedure permitted a more direct assessment of the problem-solving process of dysphonic and nondysphonic subjects. The video presentation was used to engage the subject with the presenting problem of a
loss of a close relationship and the plight of the main character. Post-test questioning revealed that the subjects felt that the problem depicted in the video was indeed a salient concern to a college-age population and that they could easily relate and identify with the "break-up" theme and the characters presented in the video. As many as 85% of the dysphoric subjects stated that they thought the break-up situation depicted in the video presentation was not in their power to change. In contrast, only 33% of the nondysphoric subjects reported in the same manner.

As predicted, the dysphoric subjects viewed themselves as poorer problem-solvers than the nondysphoric group. This finding corroborates with previous studies (Heppner & Petersen, 1982; Nezu, 1986; Nezu & Ronan, 1988). In addition, those who viewed themselves as poor problem-solvers tended to use more emotion-focused and task-irrelevant statements and fewer problem-focused statements. However, the question of whether a person's negative view of their problem-solving skills would actually relate to equally poorer performance on a problem-solving task was not supported in the present study. Self-appraisal of problem solving ability predicted neither the number of solutions nor the effectiveness of these solutions. In this study, the dysphoric subjects perhaps underestimated their true problem solving skills.

It also was predicted that there would be significant group differences among the five-statement categories. This was
partially supported. Dysphoric subjects used more emotion-focused self-statements and fewer problem-focused self-statements than the nondysphoric subjects. Similar results were obtained when the frequency of each self-statements category was converted into a proportion score. Consistent with the frequent use of emotion-focused self-statements, the dysphoric subjects generated more emotion-focused solutions and fewer problem-focused solutions that dealt directly with the problem situation as compared to the nondysphoric subjects. These findings corroborate with the findings from previous studies (Billings & Moos, 1984; Mitchell, Cronkite, & Moos, 1983).

The significant difference in the frequency of emotion-focused solutions between the dysphoric and nondysphoric groups may partly be explained by how the subjects appraised the presenting problem. The majority of the dysphoric subjects stated that they thought the break-up situation depicted in the video was not in their power to change. According to Folkman and Lazarus (1980), if an individual perceives the presenting problem as "uncontrollable", they will more likely engage in emotion-focused coping. If they perceive the situation as "controllable", they will more likely engage in problem-focused coping. The present study offers some support to Folkman and Lazarus' (1980) stress coping model.

It was found that the frequency of task-irrelevant and emotion-focused self-statements correlated negatively with solution effectiveness. This finding supports Beck's view (Beck,
that generally negative thoughts of depressed people can inhibit active exploration of problem-solving alternatives.

Although group differences were found between certain self-statement categories indicating different ways of solving a problem, the present results demonstrated that the dysphoric subjects were capable of generating as many effective solutions as the nondysphoric subjects. These findings do not corroborate with those of Gotlib and Asarnow (1979) and Nezu and Ronan (1987) wherein their dysphoric subjects produced fewer and less effective solutions on the MEPS measure. One possible explanation for the inconsistent findings lies in the different methodology that was employed in the present study. The MEPS is a very structured problem-solving task where 10 interpersonal problems are presented and are provided with an assigned "ending". Subjects are instructed to write down their solutions. Subjects' solutions are then evaluated as to how many and how relevant they are at bringing about the given ending. The problem solving task used in the present study was more open-ended in that it was entirely up to the subjects to decide how the problem should end. Furthermore, a think aloud procedure was employed instead of asking for written responses. Subjects' solutions were not scored for their relevancy since an ending was not provided but instead were evaluated for their effectiveness through social validation. Since the subjects were taped and were instructed to continue responding until the four minutes elapsed, they might have felt pressured to generate more
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solutions. It is also important to note that a more broad selection of interpersonal problems are presented on the MEPS.

The present findings have several clinical implications (Nezu, Nezu, & Perri, 1989). Treatment of dysphoric individuals, particularly with the goal of improving their problem-solving skills (Nezu & Perri, 1988), should examine their self-statements and appraisals in relation to stressful life events. Dysphoric individuals should be encouraged to view problematic situations in a way that will help foster appropriate coping activities. Furthermore, proper training in the identification and usage of facilitating self-statements should be incorporated into a treatment program as a means to promote more effective interpersonal problem-solving.

The limitations of the present study suggest questions for future studies. In the present study, dysphoric subjects were sampled from a college population. Almost all of these individuals were not in treatment at the time to help alleviate their dysphoric condition. Their level of functioning was at most moderately affected. In this study only one interpersonal problem was presented to the subjects. Future studies should investigate whether the dysphoric subjects would use a similar emotion-focused approach in other interpersonal problem-solving situations to address the question of generalizability.
References


cognitive assessment methods equal? A comparison of think
 aloud and thought listing. Cognitive Therapy and Research, 9, 399-413.
thought suppression. Cognitive Therapy and Research, 15, 153-166.
changes, physiological responses, and self-statements
during social rejection imagery. Journal of Consulting and
Clinical Psychology, 47, 385-396.
D'Zurilla, T. J., & Goldfried, M. R. (1971). Problem-solving and
middle-aged community sample. Journal of Health and Social
Behavior, 21, 219-239.
Gotlib, I. H., & Asarnow, R. F. (1979). Interpersonal and
impersonal problem-solving skills in mildly and clinically
depressed university students. Journal of Consulting and
Clinical Psychology, 47, 86-95.


Lewinsohn, P. M. (1974). A behavioral approach to depression. In R. J. Friedman and M. Katz (Eds.), *The psychology of*


depression. Archives of General Psychiatry, 21, 753-760.


Author Notes

This study was in part based on the first author’s doctoral dissertation submitted to Hofstra University under the sponsorship of the second author.

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Table 1
Means Frequencies and Standard Deviations for Self-Statement Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Dysphoric (n = 13)</th>
<th>Nondysphoric (n = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Task-relevant</td>
<td>2.90</td>
<td>3.20</td>
</tr>
<tr>
<td>Task-irrelevant</td>
<td>5.60</td>
<td>3.90</td>
</tr>
<tr>
<td>Emotion-focused</td>
<td>6.00</td>
<td>6.04</td>
</tr>
<tr>
<td>Problem-focused</td>
<td>7.30</td>
<td>4.40</td>
</tr>
<tr>
<td>Silence</td>
<td>2.30</td>
<td>3.20</td>
</tr>
</tbody>
</table>
Table 2

Frequencies of Emotion-Focused and Problem-Focused Solutions, and Effectiveness Score

<table>
<thead>
<tr>
<th>Solution</th>
<th>Effectiveness Score</th>
<th>Depressed</th>
<th>Nondepressed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotion Focused Solutions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Start dating people</td>
<td>1.00</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>already taken</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Make him/her jealous</td>
<td>1.20</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. Ventilate anger</td>
<td>1.30</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. Apologize for being</td>
<td>1.60</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>overprotective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Get rid of objects</td>
<td>1.70</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>that are reminders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Put him/her down</td>
<td>1.90</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7. Get over hurt feelings</td>
<td>2.13</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>8. Accept loss in time</td>
<td>2.80</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>9. Keep mind off of</td>
<td>2.85</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>breakup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Talk to friends</td>
<td>3.25</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>11. Think positive</td>
<td>3.30</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>thoughts about self</td>
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</tr>
</tbody>
</table>
Table 2 (Continued)

**Problem-Focused Solutions**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. See each other only on weekends</td>
<td>1.60</td>
<td>2</td>
</tr>
<tr>
<td>2. See others while still remaining friends</td>
<td>1.65</td>
<td>2</td>
</tr>
<tr>
<td>3. Start over with a clean slate</td>
<td>1.80</td>
<td>0</td>
</tr>
<tr>
<td>4. Cool off relations for a while</td>
<td>1.80</td>
<td>5</td>
</tr>
<tr>
<td>5. Stop being overprotective</td>
<td>1.85</td>
<td>3</td>
</tr>
<tr>
<td>6. Improve friendship with him/her</td>
<td>2.30</td>
<td>1</td>
</tr>
<tr>
<td>7. Problem-solve together to correct mistakes in the relationship</td>
<td>2.80</td>
<td>0</td>
</tr>
<tr>
<td>8. Get more involved with outside interests</td>
<td>3.05</td>
<td>4</td>
</tr>
<tr>
<td>9. Take time to cool down before talking</td>
<td>3.10</td>
<td>4</td>
</tr>
<tr>
<td>10. Find someone new</td>
<td>3.10</td>
<td>2</td>
</tr>
<tr>
<td>11. Make a compromise</td>
<td>3.15</td>
<td>1</td>
</tr>
<tr>
<td>12. End the relationship</td>
<td>3.25</td>
<td>2</td>
</tr>
<tr>
<td>13. Focus on own needs</td>
<td>3.30</td>
<td>3</td>
</tr>
<tr>
<td>14. Communicate</td>
<td>3.55</td>
<td>5</td>
</tr>
</tbody>
</table>
Figure Caption

Figure 1. Mean proportion in percent of five self-statement categories for dysphoric and nondysphoric groups.
Group

- Dysphoric
- Nondysphoric

T = Task; E = Emotion; P = Problem