The study investigated the relationship between the use of Holotropic Breathwork and therapeutic changes in levels of distress associated with self-identified problems, death anxiety, self-esteem, and sense of affiliation with others. Two groups of 24 subjects were compared using a repeated measures design. One group participated in a combination of experientially oriented psychotherapy plus six monthly sessions of Holotropic Breathwork (Breathwork Group); the second group participated only in experientially oriented psychotherapy (Therapy Group).

Dependent measures were Templer's Death Anxiety Scale, the Abasement and Affiliation subscales of the Personality Research Form-E, and a questionnaire regarding self-identified problems. The Breathwork Group showed significant reductions in death anxiety and increases in self-esteem compared to the Therapy Group. No significant differences were observed between groups on affiliation or self-identified problems. Results suggest that experiential approaches to psychotherapy may be useful in ameliorating some types of psychological problems.

The second half of the twentieth century has seen a proliferation of experientially-oriented psychotherapies. Many of the originators of these approaches to psychological and emotional healing have recognized that intellectual understanding of the nature and manifestation of a particular psychological problem is often not sufficient to resolve it (e.g., Grof, 1985; Janov, 1970; Perls, 1976). These theorists maintain that the fullest possible resolution of therapeutic issues can best occur when the treatment approach accesses multiple levels of experience (i.e., cognitive, affective, physiological, behavioral).

However, claims for the efficacy of such experiential approaches are often based primarily on clinical observation. In addition, the results of the few empirical studies that have been conducted are somewhat mixed in their support for the effectiveness of experiential approaches (Wolf & Goldfried, 1988).

The primary purpose of this study was to conduct an empirical examination of one experiential approach to psychological healing, Holotropic Breathwork. Holotropic Breathwork is a nonverbal therapeutic technique which employs deep, rapid breathing, evocative music, and focused body work to facilitate the emergence and processing of material rooted outside conscious awareness. For example, the Holotropic Breathwork method may allow one to access, fully re-experience, and integrate previous trauma such as a serious childhood injury. Proponents of Holotropic Breathwork maintain that this process of working through and integrating the traumatic
material often leads to the resolution of seemingly intractable psychological problems (Grof, 1985).

The Roots of Holotropic Breathwork: Transpersonal Theory

Holotropic Breathwork can be described as a therapeutic approach designed to fully access the ordinary (e.g., conscious) and non-ordinary (e.g., unconscious) realms of human experience. Stanislav and Christina Grof (Grof, 1975, 1985, 1988; Grof & Grof, 1980) developed the breathwork technique as a means of accessing unconscious levels of human experience and of resolving conflicts rooted in those levels.

Originally trained in classical psychoanalysis, Stanislav Grof developed a comprehensive theory of the cartography of the human psyche which placed him firmly in the school of Transpersonal Psychology. At first glance, Grof’s Transpersonal Theory seems to represent a radical departure from traditional psychological theory. However, a closer examination of Grof’s major tenets indicates that they are firmly rooted in more established approaches (e.g., Jung, 1960; Perls, 1976; Rank, 1952). In his metapsychology, Grof postulates three levels in the cartography of the human psyche: The biographical-recollective level, the perinatal level, and the transpersonal level. The parameters of the three levels are discussed individually below.

Biographical Level

As the repository of all of one’s postnatal experiences, the biographical level has been the focus of most forms of psychotherapy. This level includes conscious memory of past experiences as well as unconscious cognitive, physical, and emotional memory of those events.

Perinatal Level

Grof maintains that relatively few psychological problems have their roots solely in the biographical level. Rather, he postulates that many types of psychopathology often seem to be primed by, or rooted in, various aspects of the birth experience.

In essence, Grof maintains that the person’s physiological and emotional experiences during the various stages of the birth process leave indelible traces on the psyche. The perinatal experiences typically occur in clusters with characteristics related to the four clinical stages of birth (Grof, 1985). These clusters, termed basic perinatal matrices (BPM), each have specific somatic and emotional content. In situations where one or more of the birth stages is particularly protracted, difficult, or life threatening, it is expected that its associated themes would be repeatedly reactivated throughout the person’s life, thus forming a foundation for possible later psychological problems.

Transpersonal Level

Grof maintains that the perinatal level of unconscious experience functions as a bridge between the biological realm and the transpersonal realm. He defines transpersonal experiences as the “experiential expansion or extension of consciousness beyond the usual boundaries of the body ego and beyond the limitations of time and space” (Grof, 1988, p. 38). Examples of transpersonal experiences include “past life” experiences, complete identification with an animal species, profound spiritual experiences, and so on.

Transpersonal experiences appear to tap sources of information lying far outside the range of an individual’s concrete knowledge base as well as outside of the range of ordinary human experience. The most essential feature of transpersonal theory is the postulate that all aspects of existence are intrinsically interrelated and mutually interdependent. Consequently, Grof and others suggest that the issues underlying much psychological dysfunction (such as fear of death, low self-esteem, or a pervasive sense of alienation) may be resolved through transpersonal experiences (Grof, 1985).

Holotropic Breathwork

Transpersonal theory asserts that the resolution of most forms of psychopathology requires accessing and fully experiencing events rooted in all three levels of the human psyche. The Grofs (1985) developed the technique of Holotropic Breathwork as a means of accomplishing this task. The breathwork technique is actually fairly simple. The patient is instructed to lie down, relax fully, and then to begin breathing as rapidly and deeply as possible. As the patient begins the process of deep rapid breathing, highly evocative music is played. The combination of deep rapid breathing and the evocative music induces a trance state which facilitates the loosening of any cognitive, emotional, and physical barriers to en-
tering the altered states of consciousness necessary to access the perinatal and transpersonal realms, as well as repressed material from the biographical realm (Grof, 1988). The trance state produced by Holotropic Breathwork is seen primarily as an intrapsychic journey with minimal, if any, verbal communication between patient and therapist. Sessions generally last from 1½ to 3 hours.

While the materials encountered in any given breathwork session may vary, they often include themes of death and rebirth, of struggle and eventual transcendence, and of a deep sense of connectedness to others and to the universal whole. These sessions often alter an individual’s perception and experience of his/her psychological problems and shift his/her focus from personal suffering to concerns with things beyond the self. Consequently, Grof suggests that Holotropic Breathwork experiences often lead to a marked reduction in death anxiety, increases in self-esteem, and increases in one’s sense of connection with others. The variables of death anxiety, self-esteem, and sense of affiliation with others were thus selected for examination in this study based on the theory underlying Holotropic Breathwork. In addition, proponents of this approach claim that it can speed the course of therapy and may be particularly effective with patients who are experiencing an impasse in the therapy or whose problems seem intractable.

Method

Subjects

In order to investigate the use of Holotropic Breathwork itself, the study utilized two groups: One including subjects who participated in a series of six monthly breathwork sessions in addition to ongoing experientially oriented verbal psychotherapy (Breathwork Group); and the other including subjects who participated only in ongoing experientially oriented verbal psychotherapy (Therapy Group). Subjects were self-selected into these groups, as random assignment to groups was not clinically feasible.

All subjects were referred by a pool of clinicians who described themselves as practicing experientially oriented verbal psychotherapy. Experientially oriented verbal psychotherapy included therapeutic approaches such as Gestalt Therapy or Dynamic Therapy, which rely heavily on verbal interaction between therapist and patient, and which focus on the expression of multiple levels of the patient’s experience, such as the affective and physiological as well as the cognitive levels.

There were 24 subjects in the Breathwork Group (5 males and 19 females). All identified themselves as Caucasian, and they ranged in age from 32 to 50 years, with a mean age of 39.3 years. Prior to the beginning of the study, breathwork subjects had received a mean of 82.7 months of psychotherapy, with a range of 6 to 240 months. As involvement in the Breathwork Group necessitated a six month commitment, participants were required by the breathwork facilitators to have had at least one breathwork experience prior to their acceptance into the group to ensure their suitability for the group. It was thus not possible to obtain a sample of Breathwork subjects who had had no prior experience with Holotropic Breathwork. The number of previous breathwork experiences ranged from 1 to 23, with a mean of 7.6.

There were also 24 Therapy Group subjects (6 males and 18 females). All identified themselves as Caucasian, and they ranged in age from 22 to 49 years, with a mean age of 36.2. Therapy Group subjects had a mean of 55.8 months of psychotherapy prior to the beginning of the study, with a range of 3 to 300 months. None of the Therapy Group subjects had any experience with Holotropic Breathwork. Between group differences in age and length of time in therapy were not significant.

Instruments and Procedures

Three of the dependent variables selected for study (death anxiety, sense of affiliation with others, and self-esteem) were derived from transpersonal theory and were seen as being particularly amenable to change through Holotropic Breathwork (Grof, 1985, 1988). These variables were measured by Templer’s Death Anxiety Scale (DAS) (Templer, 1970), the Affiliation subscale of the Personality Research Form-E (Aff. Scale) and the Abasement subscale of the PRF-E (SE Scale), respectively (Jackson, 1984). All of these are True-False scales.

Several studies have indicated that the DAS has acceptable levels of reliability (.83) and validity (.76) as a measure of death anxiety (Templer, 1970). Scores on the DAS range from 0 to 15. A high score on the DAS indicates a high level of
death anxiety. Normative data for the DAS indicates that subjects with a high level of expressed concern about death received a mean score of 11.62 on the DAS, while control subjects received a mean score of 6.77 (Templer, 1970).

The Aff. Scale and the SE Scale were adapted from the Affiliation and Abasement subscales of the PRF-E. Although the exact statements for each of these scales were included in the study, the order of the statements was rearranged to control for social desirability effects (Conrad & Maul, 1981). The Aff. Scale and the SE Scale have been shown to have acceptable levels of reliability (.93; .85) and validity (.80; .48) as measures of sense of affiliation with others and of level of self-esteem (Jackson, 1984). The range of scores for both scales is 0 to 16. A high score on the Aff. Scale indicates a low level of affiliation. A high score on the SE Scale indicates a low level of self-esteem. Normative data indicates a mean score of 8.93 on the Aff. Scale and 7.66 on the SE Scale for female college students (Jackson, 1984).

In order to obtain information regarding the types of problems the subjects themselves saw as important, they were also given a questionnaire, developed for this study, which asked them to list, describe, and rate (on a Likert scale) the severity of the top three problems for which they were seeking help through psychotherapy. This instrument is referred to as the Problems Questionnaire (PQ).

Both Therapy Group and Breathwork Group subjects completed the four scales prior to the beginning of the six month breathwork group (pre-test) and again at the end of three months (post-test 1) and six months (post-test 2). These data collection points were selected to allow comparisons to be made between scores obtained prior to, in the middle, and at the end of the six breathwork sessions. The post-test versions of the PQ reminded the subjects of the problems they listed on the pretest version and asked them to rate and describe their current experience of those same problems.

By participating in the 6 monthly breathwork sessions in addition to regular weekly psychotherapy, the Breathwork Group subjects could be seen as receiving more therapeutic attention than did the Therapy Group subjects, and any difference found between groups could be reasonably attributed to this extra attention. To address this potential confound, Therapy Group subjects were also administered the instruments a fourth time, six weeks after their six month assessment. It was thought that the six additional therapy sessions received by the Therapy Group during this time would equal the attention, at least when the number of sessions is evaluated, received by the Breathwork Group in the six breathwork sessions.

To assess the potential variance attributable to therapeutic attention, initial analyses were conducted comparing the scores on the first, second, and third test administrations for both groups; with additional analyses comparing the first, second, and third administrations for the Breathwork Group with the first, second, and fourth administrations for the Therapy Group. No significant differences were observed between the two sets of analyses. Therefore, the results from the second set of analyses are reported below.

**Results**

An overall repeated measures MANOVA was performed using the DAS, Aff. Scale, and SE Scale as dependent variables and group, time, and group-time interaction as independent variables. The MANOVA found no main effect for group or time, but did show a group by time interaction \([F(6, 41) = 5.36, p = .001]\], with the Breathwork Group showing greater change over time than the Therapy Group. Post-hoc analyses were conducted for each scale to further evaluate this interaction.

**Death Anxiety Scale**

An analysis of variance comparing the pretest DAS scores of the Breathwork Group with the Therapy Group showed no differences between groups at the beginning of the study. The mean scores and standard deviations for each group for each administration of the DAS are summarized in Table 1.

Repeated measures ANOVA showed no effect for group but a significant effect for time \([F(2, 45) = 3.75, p = .031]\) and for the group by time interaction \([F(2, 45) = 10.12, p = .001]\), with the Breathwork Group showing greater change over time. A comparison of the pretest and posttest 1 (3 months) results found only a group by time interaction \([F(1, 46) = 3.95, p = .05]\). The comparison of post-test 1 and post-test 2 (6 months) results also found a significant interaction for group by time \([F(1, 46) = 18.29, p = .001]\).
TABLE 1. Mean Scores on Repeated Administrations of the Death Anxiety Scale (DAS) and SE Scale (Self-Esteem)

<table>
<thead>
<tr>
<th>Administration</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAS</td>
<td>BW</td>
<td>7.16</td>
<td>2.40</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>6.25</td>
<td>3.05</td>
</tr>
<tr>
<td>SE</td>
<td>BW</td>
<td>6.58</td>
<td>2.14</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>7.25</td>
<td>3.24</td>
</tr>
<tr>
<td>Post 1 (3 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAS</td>
<td>BW</td>
<td>6.50</td>
<td>2.58</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>6.54</td>
<td>3.06</td>
</tr>
<tr>
<td>SE</td>
<td>BW</td>
<td>6.12</td>
<td>1.65</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>7.08</td>
<td>2.99</td>
</tr>
<tr>
<td>Post 2 (6 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAS</td>
<td>BW</td>
<td>5.66</td>
<td>2.46</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>6.95</td>
<td>2.94</td>
</tr>
<tr>
<td>SE</td>
<td>BW</td>
<td>5.41</td>
<td>1.76</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>7.79</td>
<td>2.70</td>
</tr>
<tr>
<td>Post 3 (7.5 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAS</td>
<td>TX</td>
<td>6.66</td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td>TX</td>
<td>7.20</td>
<td>3.09</td>
</tr>
</tbody>
</table>

*Note.* Between group differences on all post-test administrations significant at .05 or less.

BW = Breathwork Group (N = 24).

TX = Therapy Group (N = 24).

.001]. The Breathwork Group showed the greater change in both instances. Analysis of covariance, with overall number of months of psychotherapy prior to the beginning of the study (3 to 300) held constant, indicated that length of prior time in therapy did not significantly influence the group by time interactions observed for the DAS.

**Aff. Scale**

Analysis of variance for the pretest Aff. Scale (sense of affiliation) indicated no difference between groups at the beginning of the study. A repeated measures ANOVA, with scores on the Aff. Scale as the dependent variable, and group and time as the independent variables, found no significant main effects or interactions over time.

**SE Scale**

Analysis of variance for the pretest SE Scale (self-esteem) indicated no difference between groups at the beginning of the study. The group means and standard deviations across administrations for the SE Scale are summarized in Table 1. Repeated measures ANOVA with scores on the SE Scale as the dependent variable, and group and time as the independent variables, found no main effect for group or for time across the three test administrations. However, a significant interaction for group by time was found \[F(2, 45) = 3.14, p = .048\], with the Breathwork Group showing greater change over time. An ANOVA comparing pretest and post-test 1 (3 months) scores of the two groups showed no significant effects. An ANOVA comparing post-test 1 and post-test 2 (6 months) scores showed a significant main effect for group \[F(1, 46) = 6.77, p = .012\] and an interaction effect for group by time \[F(1, 46) = 10.06, p = .003\], with the Breathwork Group showing greater change over time. Analysis of covariance indicated that the group by time interaction was not significantly influenced by overall length of prior time in therapy.

**Breathwork “Rookies” vs. “Experienced” Subjects**

Additional exploratory analyses were performed comparing more “rookie” breathwork subjects and more “experienced” breathwork subjects on the SE Scale and the DAS, in order to investigate the possible influence of number of prior breathwork experiences on the overall performance of the Breathwork Group on these scales. For the purpose of these analyses, “rookie” was defined as a breathwork subject who had had no more than 4 breathwork experiences prior to the beginning of the study. There were 10 “rookies” and 14 “experienced” breathwork subjects.

Analysis of variance, with scores on the scales as the dependent variables, and group and time as the independent variables, indicated that the “rookies” and “experienced” breathwork subjects differed in their scores on the pretest of the SE Scale \[F(1, 22) = 4.18, p = .053\]. The “experienced” subjects had higher levels of self-esteem at the beginning of the study. However, the two Breathwork Groups did not differ on the DAS at the beginning of the study.

Repeated measures ANOVA with scores on the SE Scale as the dependent variable, and subgroup and time as the independent variables, found a significant main effect for group \[F(1, 22) = 4.29, p = .050\] and for time \[F(2, 21) = 5.33, p = .013\], but no interaction effect for group by time. Between group differences thus appear to be attributable to differences observed at the outset of the study. Repeated measures ANOVA per-
formed for the DAS found a significant effect only for time \( F(2, 21) = 9.99, p = .001 \). The groups thus did not differ across time on the DAS.

**Problems Questionnaire**

A repeated measure ANOVA for Problems 1, 2, and 3, with scores on each problem as the dependent variable, and group and time as the independent variable, found significant main effects for time with \( F(2, 45) = 23.92, p = .001 \); \( F(2, 45) = 14.96, p = .001 \); and \( F(2, 45) = 12.08, p = .001 \), respectively. No main effects for group or group by time interactions were shown. Thus, while both groups showed change over time, there were no differences between groups.

**Discussion**

Holotropic Breathwork is an almost wholly experiential approach to psychotherapy, and as such seemed an ideal vehicle through which to explore the claims of many clinicians and theorists that experiential techniques facilitate psychological healing. In fact, this study does provide some support for such claims. Significant differences between groups across time were found for two of the three theoretically derived dependent variables, with the Breathwork Group showing greater reductions in death anxiety and increases in self-esteem than the Therapy Group. The fact that these differences were obtained with samples who had a great deal of prior experience in psychotherapy suggests that Holotropic Breathwork may be particularly useful with individuals who have difficulty making progress in therapy.

These results indicate that, with this sample, therapeutic improvement in death anxiety and self-esteem was stronger with a combination of Holotropic Breathwork and experientially oriented verbal psychotherapy than with experientially oriented verbal psychotherapy alone. As the study was quasi-experimental in nature, no cause and effect implications can be drawn from it. Nevertheless, the results do suggest that the combination of Holotropic Breathwork and experientially oriented verbal psychotherapy may be a useful therapeutic modality which bears further study.

A limitation of this study is that all subjects in the Breathwork Group had at least some experience with Holotropic Breathwork prior to the beginning of the study, and the range of experiences was considerable (1 to 23 sessions). The differences observed between groups thus cannot completely be attributed to the Breathwork Group subjects' Holotropic Breathwork experiences during the course of the study.

A second limitation is that there was no random assignment to groups. Subjects were not randomly assigned because it was neither practical nor clinically advisable. The differences observed between groups could thus be due to self-selection bias. A third limitation of the study is that it included a large number subjects in both groups who had received a great deal of psychotherapy prior to the beginning of the study. These results therefore cannot be generalized to short-term psychotherapy patients, but they do support the contention that Holotropic Breathwork may contribute to psychological healing even after long-term psychotherapy.

Given these limitations, however, the results do provide tentative support for some of the claims of transpersonal theory, which suggests that death anxiety should decrease and self-esteem increase when one is able to access and explore issues rooted in the perinatal and transpersonal realms. This support must be tempered because 1) no qualitative data was obtained describing the content of the breathwork experiences, and it is thus not known whether these included perinatal and transpersonal themes, and 2) the analyses showed no differences between the "rookie" and "experienced" Breathwork Group subjects on the pretest for death anxiety and across time on either death anxiety or self-esteem.

Theoretically, it would appear that increased exposure to the perinatal and transpersonal realms would produce greater changes in problems anchored in those realms, and, therefore, that there would have been 1) a significant difference between the breathwork groups on the pretest measures of both death anxiety and self-esteem, and 2) greater differences across time between the two breathwork groups on those measures, as the "experienced" group would have had more opportunities for exposure to the perinatal and transpersonal realms. However, the larger body of transpersonal theory suggests that an individual can experience a major shift in his/her experience of a problem as a result of very few profound experiences (Maslow, 1964). It is therefore possible that the differences observed between the Breathwork Group and the Therapy Group were due at least in part to a few especially powerful experiences undergone by some of the breathwork subjects. If this was indeed the case, it may be
that Holotropic Breathwork is particularly useful with psychotherapy patients who have difficulty resolving long standing underlying issues. Future investigations which include the collection of qualitative data might shed some light on these issues.

In summary, the results of this study suggest that the combination of Holotropic Breathwork and experientially oriented verbal psychotherapy may facilitate reductions in death anxiety and increases in self-esteem, both of which transpersonal theory posits as the root of sometimes seemingly intractable psychological problems. Thus, the study provides beginning empirical support for the contention that experientially oriented psychotherapies may be useful therapeutic modalities, particularly with long term psychotherapy patients.

References


