

Holotropic Breathwork: A Review

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Abstract:

Holotropic Breathwork is a method of psychotherapy that was developed by Stanislav and Christina Grof in the mid-1970s. It is a therapeutic practice utilizing breathwork, music, and bodywork that is designed to produce an altered state of consciousness, similar to psychedelic experiences. This paper presents a review of the literature on the topic of holotropic breathwork, the components of holotropic breathwork, and the potential implications for use.

Methods: Literature Review

Results: Holotropic breathing, which uses non-ordinary states of consciousness as a therapeutic tool, deserves further con-sideration.

History and Background

Holotropic Breathwork is a method of psychotherapy that was developed by Stanislav and Christina Grof in the mid-1970s. It is a therapeutic practice utilizing breathwork, music, and bodywork that is designed to produce an altered state of consciousness, similar to psychedelic experiences induced by LSD, DMT, mescaline, psilocybin, MDMA, ayahuasca, and other entheogens [1]. This presents a non-pharmacological method to achieve non-ordinary states of consciousness in a manner that is likely less likely to have negative health effects. Suggested risks of holotropic breathwork include a possible exacerbation of underlying seizure disorder or arrhythmias, although this has not been extensively documented [2,3,4].

Main Components of Holotropic Breathwork

Breathwork

As demonstrated by history cross-culturally, many religious sects have found profound changes in consciousness can be induced by both extremes of breathing rate, hyperventilation, prolonged withholding of breath [5]. Grof described the psychosomatic response to the fear of breathing faster to be

a process to counteract fear itself and one with enormous healing potential [6].

The theory behind holotropic breathwork is somewhat based on psychoanalysis. Grof feels his work reaffirms Wilhelm's Reich's observation that psychological resistances and defenses are associated with restricted breathing [7]. He notes that an increase in the pace of breathing typically loosens psychological defenses and leads to a release in the emergence of an unconscious or superconscious material [8].

Music

Like breathing, many pre-industrial cultures independently developed drumming rhythms, chants, and music in general that have since been shown to have a demonstrable effect on brain activity [9,10,11]. He notes that cultural anthropologists have cited numerous cross-cultural examples of trance-inducing methods of an extraordinary power by use of sound [12,13]. Grof carefully selected music to serve several important functions. He felt that it would immobilize emotions associated with repressed memories, bring them to the surface, and facilitate their expression [14]. He felt that it helped open the door into the unconscious, intensified and deepen the healing process, and provided a meaningful context for the experience. He describes the continuous music as creating a "carrier

wave” that helps individuals move through difficult experiences, overcome psychotic defenses, and to surrender ^[6].

He notes that music has an additional important function in the group setting. It masks the noises made by participants and merges them into a complex aesthetic form. He advises completely surrendering to the flow of the music during a holotropic therapy session, even if this leads to crying, shaking, laughing, or screaming. The recommended musical pieces are those which are unfamiliar, perhaps not in the native tongue of the listener. Grof describes five musical phases of the session: opening music, trance-inducing music, breakthrough music, heart music, and meditative music ^[7,8].

As a summary, the music begins as dynamic and emotionally uplifting. It gradually increases in intensity, and culminates into “breakthrough music” such as orchestral pieces or dramatic movie soundtracks, about an hour and a half into the session. The intensity of the music then decreases, terminating in a more soothing and meditative manner ^[7,8].

Bodywork

Grof also describes the importance of the physical response induced by holotropic breathwork. The physical response to hold the breathwork varies considerably from one person to another. Most commonly, faster breathing brings, at first, intense psychosomatic manifestations ^[5]. These are, at times, in line with what is known as hyperventilation syndrome. This is a stereotypical pattern and physiological response that consists primarily of tensions in the hands and feet ^[15,16].

Grof notes that through his many holotropic breathing sessions, that fast breathing carried over a 3 to 4 hours does not seem to lead to the classical hyperventilation syndrome, but rather a progressive relax-

ation, sexual feelings, and even at times mystical experiences. He states that during a session, when individuals develop carpopedal spasms, they tend to be self-limited ^[6]. Grof argues that, at times physical manifestations that develop during the breathing in various areas of the body are not merely physiological reactions to hyper-ventilation but may have complex psycho-somatic structure and usually have a specific psychological meaning for the individuals involved ^[17]. The intense rhythmic breathing is said to produce increasing tensions in the body that reaches a climax and is followed by a profound relaxation ^[6].

Grof describes two mechanisms behind this phenomenon. The first mechanism he relates to the “catharsis and abreaction” similar to Sigmund Freud and Joseph Breuer’s study of hysteria. According to Grof, pent-up physical energies are discharged through tremors, twitches, dramatic body movements, coughing, and vomiting. The second mechanism Grof describes takes the form of “unrelenting muscular contractions of various duration, which he describes as “tetany.” In this, the participant uses lots of pent-up energy through repeated tensions, causing a deep relaxation to follow ^[6].

Nourishing Physical Contact

Grof also encourages the use of “nourishing physical contact” during therapy sessions. This can be in the form of hand-holding or touching the forehead. Grof emphasizes the importance of obtaining the participant’s consent for this and recognizing boundaries. This physical contact can be used to heal traumas caused by neglect, abandonment, or other emotional trauma, similar to the method termed “fusion therapy” ^[6]. This therapy was developed by London psychoanalysts Pauline McCrirck and Joyce Martin, in which

they use close physical contact with LSD to heal their patient's traumas ^[18].

Mandala Drawing

After the breathing sessions, participants express their experiences by drawing mandalas. The term "mandala" comes from the classical Sanskrit language and generally translates to circle ^[19]. A mandala is generally a term for a design with geometrical symmetry, for example, a spiderweb or flower. Many ancient cultures have widely used mandalas. In the Western world, they were first used as therapy by Carl Jung, who described the mandala as a "psychological expression of the totality of the self" ^[20].

There is some evidence that Mandala therapy may benefit those suffering from PTSD. There is limited research on using mandalas in therapy, but current literature is investigating the use of art in the treatment of anxiety and the ability to increase mindfulness ^[21,22].

Following a holotropic breathwork session, the participants are asked to meditate on their experience and try to depict the session by drawing a mandala. Grof does not give specific guidelines for the mandala drawing. He encourages various forms and notes that the mandala drawing may either be representative of the immediately preceding session or may also anticipate events of the next session. Grof explains this phenomenon with Jung's idea that "the psyche cannot be fully explained from preceding events ^[6]."

Group Sharing

After the Mandala drawing, participants bring their mandalas to a group sharing session. Facilitators encourage participants to openly discuss their experiences. In contrast to the usual psychotherapeutic practice, facilitators are discouraged from interpreting the experiences of the participants. Instead,

Grof encourages facilitators to ask questions to help the participant discover their own interpretation. Grof also notes that if the experiences contain archetypal content, it may be useful for facilitators to point out parallels shared by mythological motifs from other cultures, a method termed "amplification" from C.G. Jung ^[6,23].

Physiologic Mechanism of Action

The mechanism behind holotropic breathing is not entirely known. Grof proposes that it is similar to the physiology of breathing at high altitude. In high altitude, an increased respiratory rate and depth compensate for a lower oxygen partial pressure in the air and decrease carbon dioxide blood levels. This decrease in brain CO₂ partial pressure and concomitant increase in pH is known as respiratory alkalosis, which has neurophysiologic effects. It is thought that the cerebral cortex is the most sensitive to this change, and it is thus temporarily inhibited ^[24]. In this state, trans-personal experiences may be revealed. As Grof points out, this may be why individuals from cultures who live in high altitudes are known for their spirituality ^[6,9].

In a relaxed state, inspiration consists of the diaphragm moving downwards and the abdominal wall and muscles moving outward as the upper rib cage expands ^[25]. Normal relaxed breathing is effortless and rhythmic. Studies show that inhibited breathing is a response to uncomfortable experiences. For example, people in a public work environment showed sustained inhibited breathing patterns compared to being at home. Inhibited breathing is characterized by an extended, over-controlled exhalation, delayed onset of inspiration, and shortened duration of inspiration. Breath-holding can occur in extreme cases ^[4].

This inhibited breathing pattern has several implications. First, the suppression of

breathing is associated with increased CO₂ levels and blood pressure, which is associated with increased anxiety and poor mood [26]. This points towards a positive feedback loop, in which anxiety leads to breathing suppression, which furthers anxiety.

Inhibited breathing also affects neurologic functioning. During breathing suppression, less oxygen is exchanged in the blood. The brain has little to no reserve of oxygen in the blood and is therefore sensitive to oxygen deprivation. This depletion in oxygen may affect energy production and serotonin synthesis [27].

Suggested Efficacy

To date, there have been very few studies on the effects and uses of holotropic breathwork.

A 1996 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 a sense of affiliation with others. Those who received both breathwork and therapy showed significant reductions in death anxiety and an increase in self-esteem compared to those only receiving therapy [28].

Dr. James Eyerman conducted a 2013 report on approximately 11,000 psychiatric inpatients who participated in holotropic breathwork over a 12-year period (from 1989 to 2001). 82% reported transpersonal experiences. Dr. Eyerman also includes two case reports of patients during the breathwork, who achieved metaphysical experiences that helped them overcome their trauma and depression [29].

A 2015 study examined temperament changes of 20 people after four sessions of holotropic breathwork. The study used the Temperament and Character Inventory (TCI-R), validated by Cloninger. The participants showed positive changes in temperament and

character following holotropic breathwork. All 20 participants also experienced a significant reduction in interpersonal problems and described an increase in self-awareness [14].

While the research on holotropic breathwork specifically is sparse, there is a large body of research on the effects of meditation on anxiety, depression, and overall mental well-being. Meditation, which involves focusing on deep, slow breathes as part of the practice, shares many components of holotropic breathwork. A 2014 meta-analysis included 47 trials that met criteria for well-designed studies. The findings suggest that mindful meditation can help ease anxiety, depression, and pain [30]. Currently, there is ongoing research on the role psychedelics may play in mental health. Holotropic breathing, which uses non-ordinary states of consciousness as a therapeutic tool, also deserves further consideration.

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