



**MIND MEDICINE**  
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**Study Group -**

**Complementing Consciousness: Theory,  
Practice, and Integration of Altered States  
of Consciousness**

# Readings

**An ego-  
psychological  
theory of altered  
states of  
consciousness**  
Erika Fromm

**Psychedelics,  
Meditation,  
and Self-  
consciousness**  
Milliere et al.

**Holotropic  
Breathwork: New  
Perspectives in  
Psychotherapy and  
Self-Exploration**  
Stanislav Grof



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**Psychedelics,  
Meditation, and  
Self-  
consciousness**

**Milliere et al.**

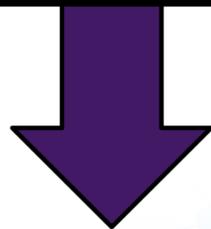
# Meditation and Psychedelics



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**TABLE 1** | Significant clusters of activation/deactivation in four common meditation styles from a meta-analysis of 78 neuroimaging studies (Fox et al., 2016).

	<b>Focused Attention (FA)</b>	<b>Mantra Recitation (MR)</b>	<b>Open Monitoring (OM)</b>	<b>Loving-Kindness (LK)</b>
Significant activation clusters	PMC Dorsal ACC	Broca's Area PMC SMC	Insula IFG SMA/pre-SMA PMC	IPL Anterior Insula
Significant deactivation clusters	PCC IPL	Anterior Insula	Thalamus	/



**Activation/deactivation on certain brain areas depending on meditation type**

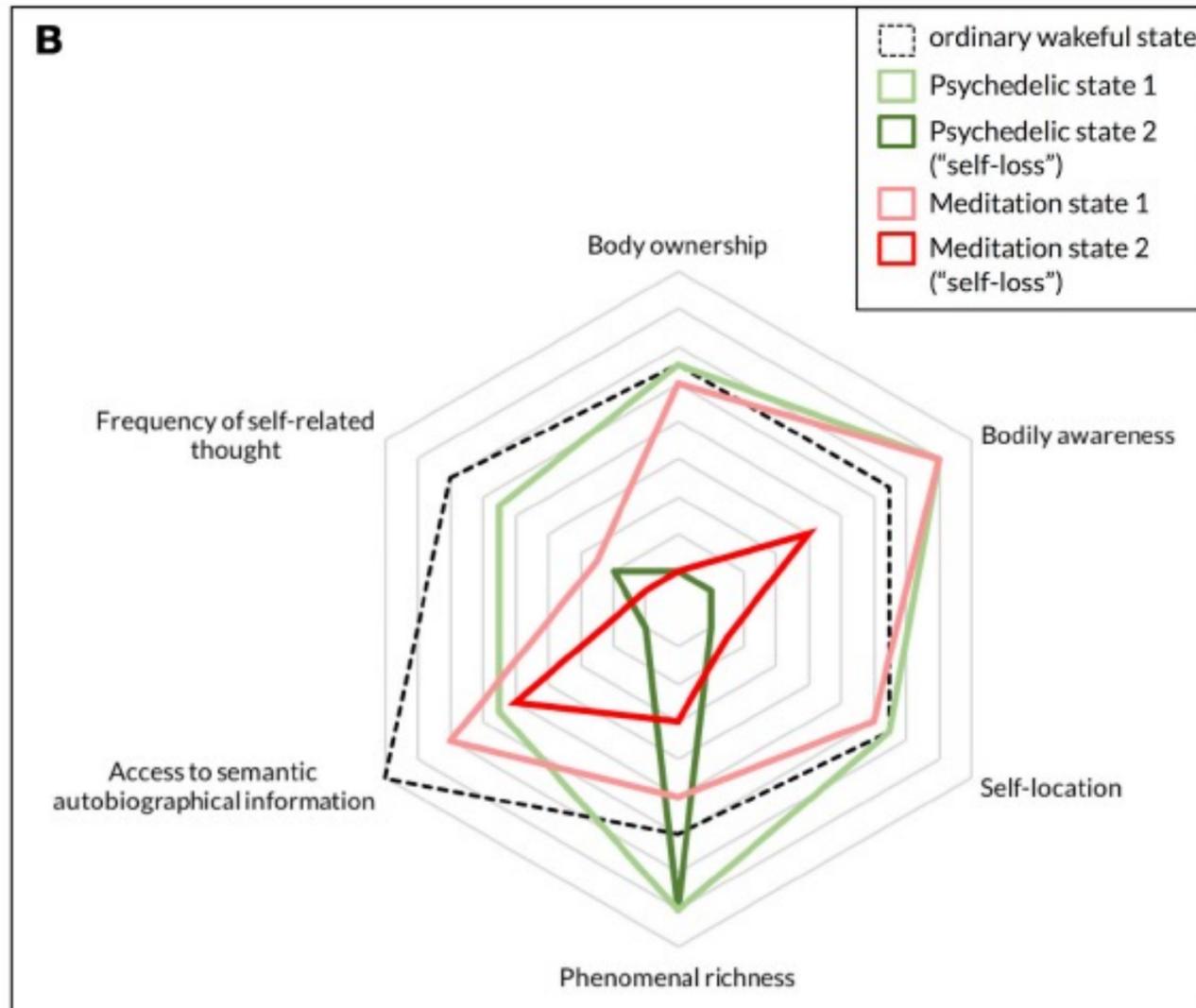
**Areas of the brain which have been shown to alter with the use of certain psychedelics**



**TABLE 2** | Main changes in activity and connectivity in the psychedelic state.

References	Psychedelic drug	Changes in activity	Changes in functional connectivity
Carhart-Harris et al., 2012 de Araujo et al., 2012	Psilocybin Ayahuasca	↘ in ACC, PCC, mPFC and thalamus ↗ in primary visual cortex during imagery task ↗ cuneus, lingual gyrus, PH, RSC, and frontopolar cortex	↘ mPFC-PCC connectivity ↗ DMN-TPN connectivity
Carhart-Harris et al., 2013 Roseman et al., 2014 Tagliazucchi et al., 2014	Psilocybin Psilocybin Psilocybin		↗ DMN-TPN connectivity ↗ between-network connectivity ↗ diversity of connectivity motifs in HP-ACC network
Palhano-Fontes et al., 2015 Carhart-Harris et al., 2016b	Ayahuasca LSD	↘ in mPFC, PCC, precuneus ↗ in visual cortex (correlating with visual hallucinations)	↘ PCC-precuneus connectivity ↘ DMN integrity and PHC-RSC connectivity
Tagliazucchi et al., 2016	LSD		↗ global connectivity, especially thalamus, frontoparietal and inferior temporal cortices
Müller et al., 2017	LSD		↗ thalamocortical connectivity

# Consciousness: how does this fit into it all?



Non-dual awareness

Pure consciousness

Total selflessness



## What are some of the questions we're left with?

**Self-reporting, is it a limitation when discussing an individual's experience of altered consciousness?**



**Milliere et al. observes this notion that unhappiness occurs through mind wondering and that to maintain 'happiness' one must learn to control their thoughts. This claim has not been substantiated, but it is an interesting concept to consider.**

**Are there inherent 'selfless' states devoid of any kind of self-consciousness?**



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**An ego-  
psychological  
theory of altered  
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**Fromm**



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**Deepest level  
of sleep**

**Waking state**

**Continuum of consciousness**



**Automatization**  
Habitualisation of both motor and cognitive responses



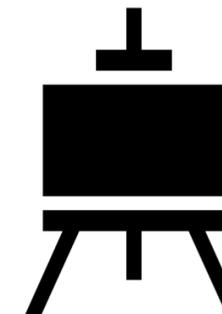
**De-automatization**  
'bringing attention to what has become habitualised'

**What are some of the processes which we need to consider when discussing consciousness?**

**Ego Receptivity**  
Mind is open to both unconscious and preconscious thoughts.  
Example is daydreaming

**Ego Activity**  
Free to make choices

**Ego Passive**  
When the mind no longer has the ability to make choices.  
Example here is psychoses



**Primary Process**  
Thinking is in the basic form of images



**Secondary Process**  
Goal-oriented and critical thinking based



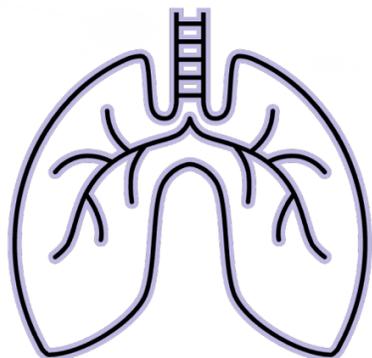
**Let's take a breath**



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**Holotropic  
Breathwork:  
New Perspectives  
in Psychotherapy  
and Self-  
Exploration**  
Grof

# Why breathing?

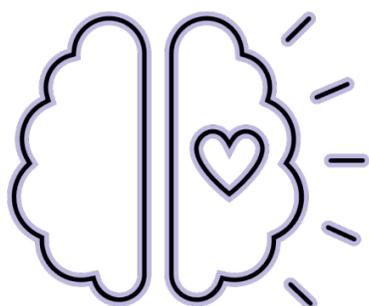


## ANCIENT KNOWLEDGE

Many cultures throughout history have had words to describe the intrinsic connection between breath/spirit/healing. One example is in Latin the word for **breath and spirit** are the same *spiritus*.

## WESTERN MEDICAL MODEL

The current western medical model has lost the connection between breathe and healing. Grof discusses this in reference to **hyperventilation syndrome**. In the western medical model this will usually be suppressed and seen as a pathological condition. In recent years however therapist have returned to recognising the healing powers from the experience.



## CONSCIOUSNESS

Through breathing at different extremes we are able to alter our consciousness through modifying the oxygen and CO2 levels within our bodies, along with musical accompaniment. These states hold extensive healing potential.

# Holotropic Breathwork



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*“The process of self-exploration and therapy in holotropic breathwork is **spontaneous** and **autonomous**, it is **governed by inner healing intelligence**, rather than following instructions and guidelines of a particular school of psychotherapy”*

## HOW IS WORKS

Group session, with people taking turns as the ‘sitter’ and the ‘breather’

Five main sections can be associated with music choice

- 1) Opening music
- 2) Trance-inducing music
- 3) Break-through music
- 4) Heart music
- 5) Meditation music

## Mandala drawing

After the breathwork is complete, facilitators will guide individuals to art rooms to usually depict their experiences. Usually this will be done in the form of a mandala, however cultures across the globe have different traditions. These artworks should not be tried to analysis.

Below is an example of a nierikas yarn artwork of the Huichol Indians



## BENEFITS

Grof identifies that with holotropic breathwork and/or psychedelics individuals will often see results within hours, opposed to the potential years for current treatments

Holotropic breathwork has also been shown to improve physical ailments as well, with reports of the following.

- Sinusitis
- Pharyngitis
- Bronchitis
- Raynaud’s disease
- Arthritis (including Takayasu)

## THE USE OF MUSIC

Grof touches on the importance of the ‘correct’ selection of music. Usually staying away from songs with vocalised words and opting for high standard musical pieces which are ‘intense, evocative and conducive’ to a positive practice.





Isn't this process  
just re-traumatising  
people?

“we aren't dealing with  
a exact replay or  
repetition of the original  
traumatic situation, but  
with the first full  
experience of the  
appropriate emotional  
and physical reaction to  
it”

(Ivor Brown 1990 in  
*Unexpected Experiences*)



What are some of the questions we're left with?

Grof provides two examples of touch during altered states one positive and one negative. What are the limitations of 'sitters' during this process and how they many inadvertently influence the breathers state of consciousness

What are some of your experiences with altered states? Where do you think you fall on the continuum?

# References



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