

Unique psilocybin truffle study targets war veterans exclusively - finds salient reductions in PTSD, anxiety & depression up to 8 weeks.

Amsterdam, Feb 14, 2022 .

An observational study into a veteran psilocybin truffle treatment protocol **In September 2021 a group of 9 military veterans followed a protocol by ['Psychedelic Insights BV'](#) to assess and measure the results of their mental wellbeing, and document their experiences.**

Neurologist Luisa Prochazkova, a PHD candidate at Cognitive Neuroscience at Leiden University, led the observational pilot study. This is the summary of her findings.

Key findings:

- Reduction of PTSD after 4 weeks 31%
- 29% drop in anxiety over 8 weeks
- Depression dropped by 18% over 8 weeks
- Improvement in wellbeing after 8 weeks 11%
- 34% change in relationships, perception of closeness



(<https://vimeo.com/641554882>)

A veteran retreat in nature and guided by psychedelic therapists, using natural, psilocybin truffles, showed dramatic positive effects on the veterans' levels of anxiety, PTSD and depression, lasting up to 8 weeks.

Why is the study unique?

In this pilot study, the treatment of war veterans with psilocybin was studied, and the emotional well-being of the veterans was monitored.

While some research has been done on treatments with psilocybin [1,2,6], no studies were found that specifically targeted war veterans as the study group.

A war veteran is a military veteran who once served in combat in war but now no longer serves the military. [8] Veterans have often experienced more violence, death, pain, and traumatic events than civilians. This can cause serious mental health problems. Other emotional issues could emerge due to them being unable to be vulnerable. In other words, putting all their emotions away and “building a wall around themselves” so nothing would affect them during service. [9]

A study by Cambridge University Press found that the prevalence of mental health symptoms increased after deployment compared to pre-deployment in the Dutch military. [10] This also suggests that war veterans have an increased risk of mental health diseases. In general,

veterans have a higher risk of acquiring PTSD, depression, anxiety, substance abuse disorders, and suicidal thoughts. All this makes war veterans an interesting group to target in mental health studies because most indeed have developed mental health issues.

Concerns before the study

Veterans are an interesting target group, however there are some concerns about giving psychedelics to veterans. Psilocybin can have a profound effect on mood and emotion. Soldiers are trained to suppress and block their emotions during combat. This toughness is a problem for veterans because there is an association between emotional toughness and screening positive for a mental health condition in war veterans. [11] These mental health conditions can cause a bad trip during the treatment.

Bad trips are often triggered by unresolved psychological tensions during the experience. These tensions can be overwhelming for veterans to have that many emotions come back up all at once, resulting in a bad trip.

Another reason why there are some concerns regarding using veterans is experiential avoidance (EA). Experiential avoidance is the phenomenon that occurs when a person attempts to avoid emotions, thoughts, memories, and bodily sensations. This is a coping style that may maintain problems or produce new ones because you do not deal with the problems but avoid-suppress them. Feingold and Zerach (2020) found that experiential avoidance may be a factor for the association between mental health problems and war veterans. [12] This EA can cause the emotional suppression during the treatment with psilocybin.

Materials and Methods

a. Study design

9 individuals participated in this observational study to measure the protocols used by a psychedelic retreat "psychedelic insights". Participants were measured on quality of life and resilience following 2 doses of Psilocybin (truffles). All participants: 8 of whom male and 1 female, were Dutch military veterans with moderate PTSD symptoms participating on a path towards self-development or spirituality. The 9 individuals were screened based on mental and physical health measures. Exclusion criteria that rendered participants unsuitable for the study were psychiatric disorders, previous psychotic or manic events, and other underlying health conditions. The study took place at a wooden house in a forest surrounded by nature, which intended to create a safe, relaxed base for trust. Rapport was established by having a team work closely with the participants who themselves had had extensive experience with various psychedelics. The overall aim was to create an atmosphere of union, openness, and comfortability.

b. Procedure

a. Procedure

Before, during, and after the study participants answered several clinical study questionnaires from which a data set was created. Analysis of this data set was performed for this research project. At a baseline level, 2 days before receiving the first dose, the baseline application form assessing mental health, intentions, and personal information was answered. The questionnaires included:

- PTSD questionnaire
- Generalized Anxiety Disorder Assessment (GAD-7)
- The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)
- Relationships Questionnaire
- IOS Questionnaire
- Beck Depression Inventory (BDI)
- The Connor-Davidson Resilience Scale (CD-RISK)

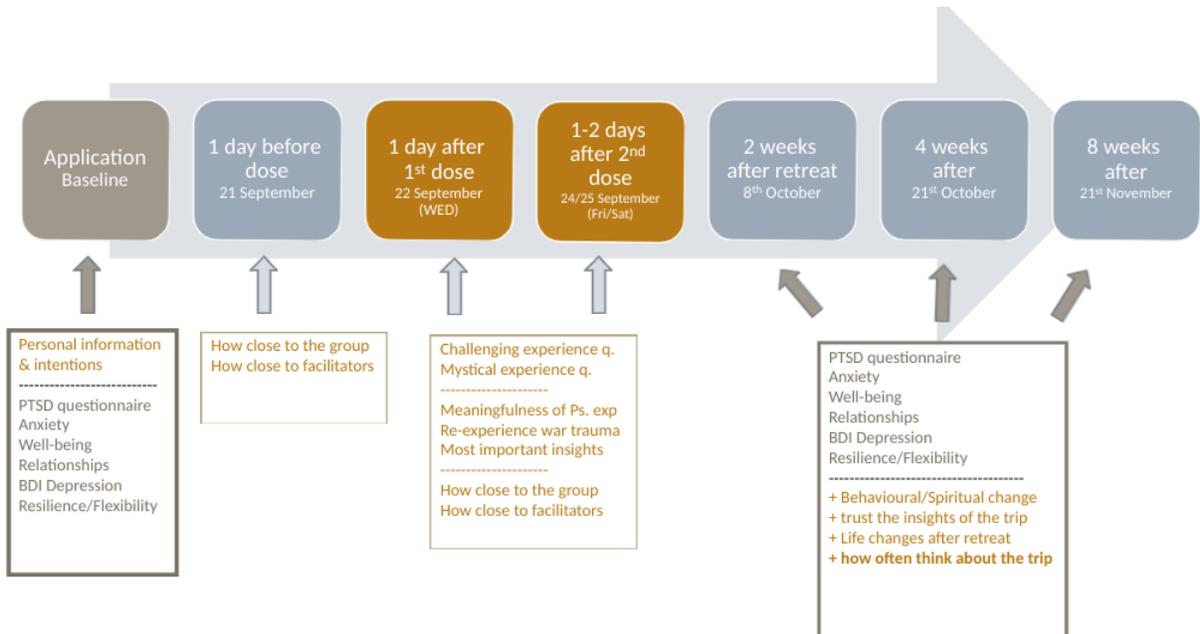
1 day before administering the drug, participants were assessed on fear/stress levels using the State-Trait Anxiety Inventory (STAI) and on closeness to the group. The participants then received their first dose, 45 grams of truffles. This amount is roughly 3 times the regular dosage; however, it was believed the veterans could handle it due to the tolerance and preservation they were taught in their profession.

On the subsequent day, participants answered the STAI again as well as questionnaires assessing the quality of their experience (whether mystical or challenging). Mystical experiences included positive aspects such as feeling a sense of unity/awareness, and challenging experiences included more negative feelings such as a sense of panic, despair, or grief.

Participants received the second dose of truffles (35 gram) a day later and completed the same questionnaires assessing fear/stress, relationships, and mystical/challenging experiences.

2-, 4-, and 8-weeks post-retreat, participants answered the same clinical study questionnaires as they had answered in the application baseline.

Study outline



Study sample

Demographics military

- 9 participants joined the retreat (8 male and 1 female)
- Participants were healthy – screened for PTSD and psychiatric conditions and medication
- Mean age 44.33 (7.2) with age range from 33 to 53

Military

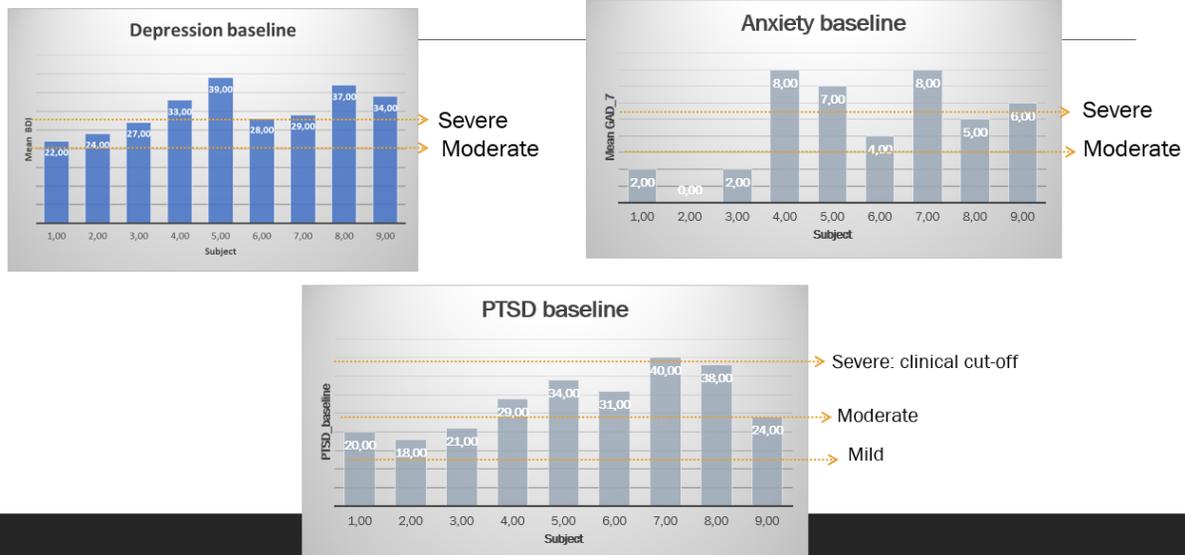
- All participants had more than 12 years of experience in military
- 5 participants were in active (S.F.) service and 4 were retired or on a sick leave
- 8 out of 9 participants previously participated on missions (minimum of 6 months - 22 months)
- Exposure to bombs blasts during training or at mission (5 out of 9 did)

Psychedelic experience

- 2 out of 9 participants had no previous psychedelic experience

- All participants scored high at depression symptoms at baseline
- 6 out of 9 reported high anxiety
- 5 showed elevated levels of PTSD symptoms

Mental health issues at baseline



Intention setting participants

- *Want to better determine my course in work and private. Listen to my gut feeling even better. Become more empowered and do what gives you energy.*
- *Overall anxiety, tension.*
- *To feel more "softness" and calmness in my body and mind. To have a stronger feeling of being in the present moment, in the now. To be more aware of feelings or sensations in my body. To be better connected with nature.*
- *To draw the line on what I can handle, and stop going on while my body says stop.*
- *Finding myself, feeling disconnected to society and myself. Don't know if this is mission or military related in general. Could have something to do with it but don't know what. Generally, just feeling stuck in limbo.*
- *Since my divorce in 2010, my ex has done everything for me to lose contact with my two sons. I hardly see them anymore. So I carry sadness with me every day, although I am now happily married (10 years) with Esther and have three beautiful "bonus" daughters.*
- *The insight of trauma of this and past lives; why I am here, on this earth.*
- *My intention is to connect maximum within myself and get an answer if I am following through on my passion.*



- *To heal from trauma. To be more grounded and to quieten my nervous system (no action vs. reaction). And develop further my spiritual path.*

The psychedelic insights after the first session

IV - Results: The Challenging Experience Questionnaire (CEQ)

The experiences of the participants were evaluated with the Challenging Experience Questionnaire (CEQ). This questionnaire serves as a valuable measure of indicating difficult experiences participants might encounter when on psilocybin or other hallucinogens. [15] Participants answer various questions such as “I felt shaky”, or “I had the profound experience of my own death” on a Likert scale from 1 (being not at all) to 5 (extreme).

a. First experience

With the first dose of psilocybin, 3 of the 9 participants had no challenging experience overall. 5 other participants found the experience so slight that they could not truly decide, and the final participant had a moderately challenging experience. The total score of the CEQ [15] of the first experience was found to be 37.2%.

b. Second Experience

The second experience of the participants with psilocybin showed a difference from the first. This time, 5 out of 9 participants had no challenging experience, 3 out of 9 had an experience so slight that they could not truly decide, and 1 participant had a moderately challenging experience overall. The total score of the CEQ of the second experience was found to be 32.4%, which is lower than the first experience, indicating a lower overall score for how challenging the second experience was compared to the first.

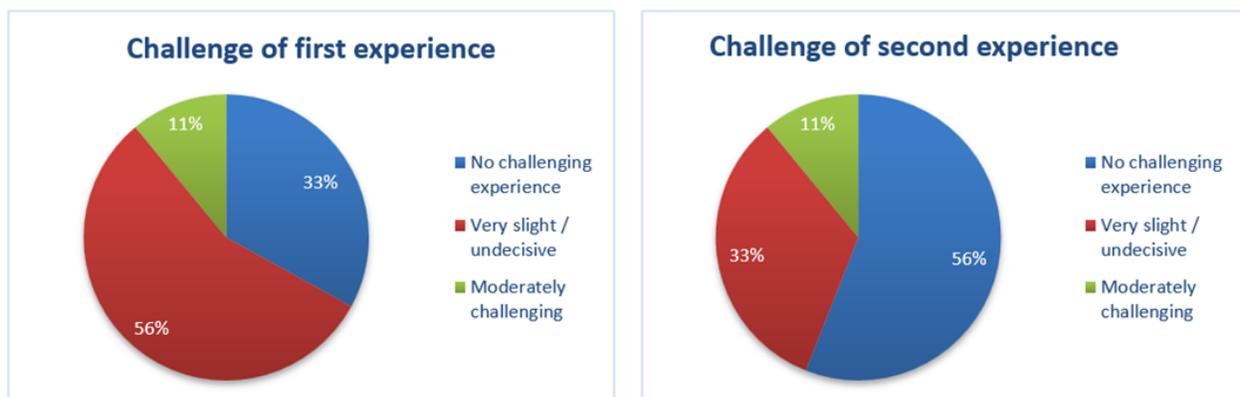


Figure 1. How challenging the experience was for the participants of the retreat. On the left is the pie chart for the first dose of psilocybin, on the right for the second dose.

c. The Challenging Experience Subscales

The Challenging Experience Questionnaire that was used consisted of seven subscales: fear, grief, physical distress, insanity, isolation, death, and paranoia (see Appendix B for an extensive overview). For each of these subscales, a comparison was made between the first and second experiences with psilocybin.

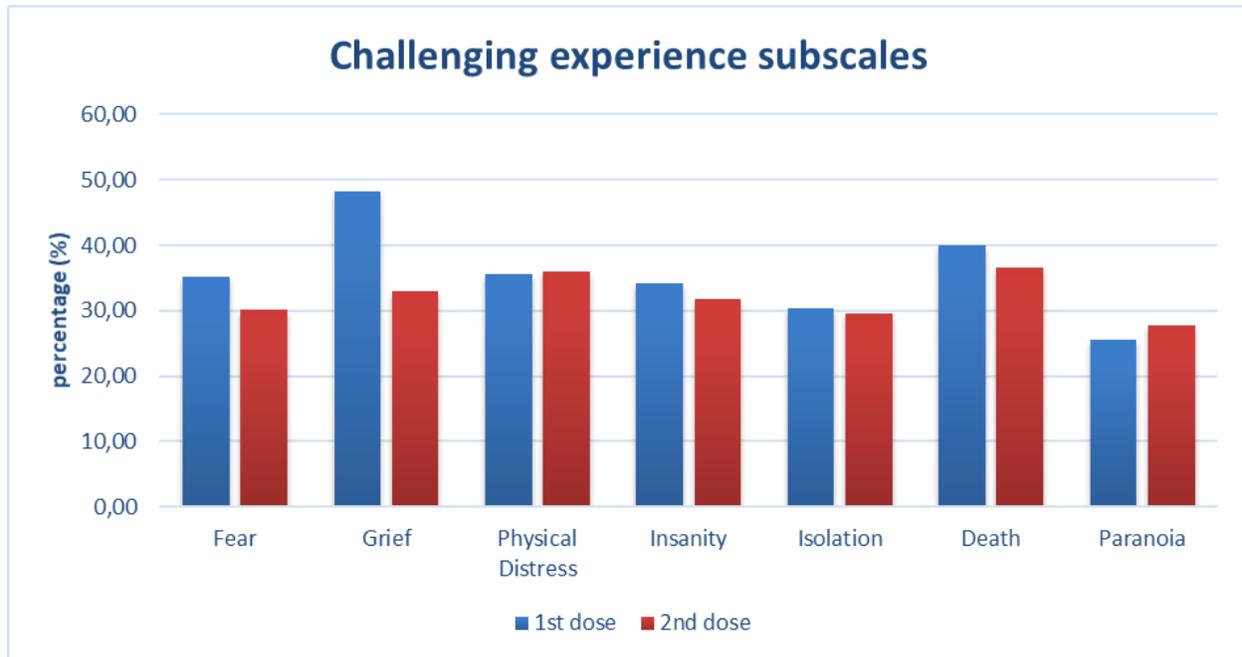


Figure 2. The total percentage of how challenging the participants found each experience with psilocybin, divided into each of the subscales of the Challenging Experience Questionnaire. All subscales showed a decrease over dosages, except for physical distress and paranoia, which showed an increase of 0.4% and 2.2% respectively. Grief showed the greatest decrease in percentage, and thus the greatest improvement. The percentages are based on the total scores of all participants on the questions of the respective subscales, divided by the maximum total amount of points that each subscale has.

For the subscales fear, grief, insanity, isolation, and death, a decrease was seen for the second dose (where less psilocybin was administered). This indicates an improvement of these feelings for the participants (this could be interesting to highlight in the documentary). Grief showed the greatest decrease, followed by fear, indicating the subject's feelings improved on both of those. This is in line with the results from a clinical study in healthy patients, where mood, attitude, and behavior improved after the use of psilocybin. [2] With physical distress and paranoia, increases were evident, of respectively 0.4% and 2.2%.

d. Limitations and conclusion

Due to the small number of participants, no absolute conclusions can be drawn about these increases, as it could simply be due to the inconsistency of answers of the participants. It may be worth looking into in the future, especially if similar results are found in other studies.

However, at this moment no studies were found that were comparable to this one, so no comparison could be made on that account.

V - Results: The Mystical Experience Questionnaire (MEQ)

The mystical experience questionnaire (MEQ) is a 30-item questionnaire that measures positive, joyous, transcendent experiences associated with psychedelics. Participants rate items such as “feelings of joy”, “loss of your usual sense of time” or “experience of unity with ultimate reality” on a scale from 1 (being none), to 6 (being extreme). As the questionnaire has been deemed a valid and reliable tool for assessing mystical experiences [16], this study made use of the MEQ to assess the experiences of the war veterans. Results will be analyzed below.

a. First experience

For the first dosage of psilocybin received, the heavier dosage out of the two administered, on average, most participants (7 out of 9) had a strongly mystical experience. This was the second highest scale on the questionnaire. Additionally, 1 out of the 9 participants had an extremely mystical experience, the highest scale on the MEQ, and another participant had a moderately mystical experience. No participants were in the none/slightly mystical experience range, rendering the first experience on average highly mystical for the war veterans. The total score of the MEQ was 84.2% for the first dose, all in all, a high satisfaction rate.

b. Second experience

In the second experience, 3 out of 9 participants had an extremely mystical experience, 3 had a strongly mystical experience and 1 had a moderately mystical experience. Additionally, 2 participants experienced only a slightly mystical experience. Hence, experiences were more spread out in this round; whereas more participants had an extremely mystical experience than in the first round, some participants, unlike in the first round, had only a slightly mystical experience. Again, as in the last round, no participants did not encounter a mystical experience (none subscale). The total score of the MEQ was 79.3, which shows a 5.8% decrease from the total score of the first experience. This shows that indeed, a lower dosage of psilocybin led to a lower mystical experience for the participants.

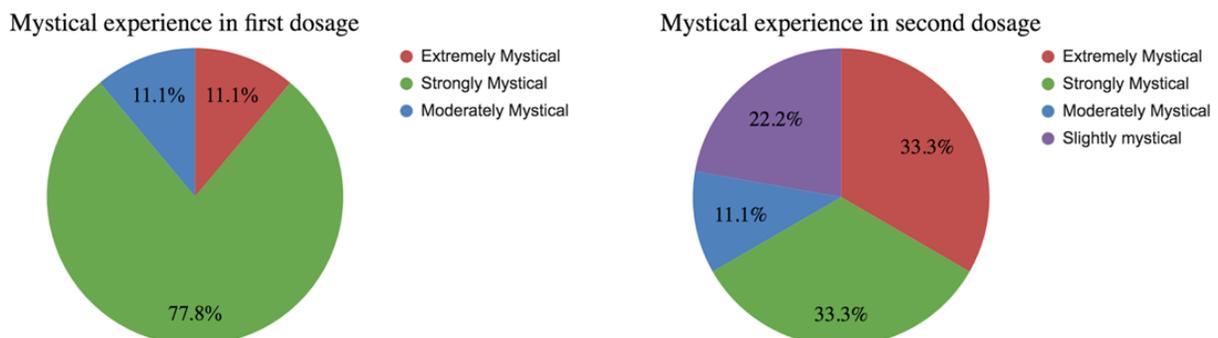


Figure 3. Pie charts depicting how mystical the experience was for the participants of the retreat. On the left is the chart for the first dose of psilocybin, on the right for the second dose.

c. **Mystical experience Subscales**

The MEQ consists of 4 reliable and valid factors that have been found to underly the classical mystical experience dimension. [16] The factors are mystical (F1) consisting of subfactors internal unity, external unity, noetic quality and sacredness; positive mood (F2); transcendence of time/space (F3); and ineffability (F4). (see Appendix A for an overview of factors and corresponding questions). [16] As was done for the challenging questionnaire, the subscales were compared for the first and second experience with psilocybin dosages.

Transcendence of time/space refers to feelings of infinite time, and limitless space. The factor ineffability refers to difficulty describing experiences to others, and a positive mood is characterized by blissful feelings. The mystical factor can be further subdivided in 4 factors, where noetic quality refers to objectivity and truthfulness of the experience, sacredness to divine or holy experiences, internal unity to unitary consciousness and external unity to unity with one's surrounding environment. [16]

Mystical experience factors

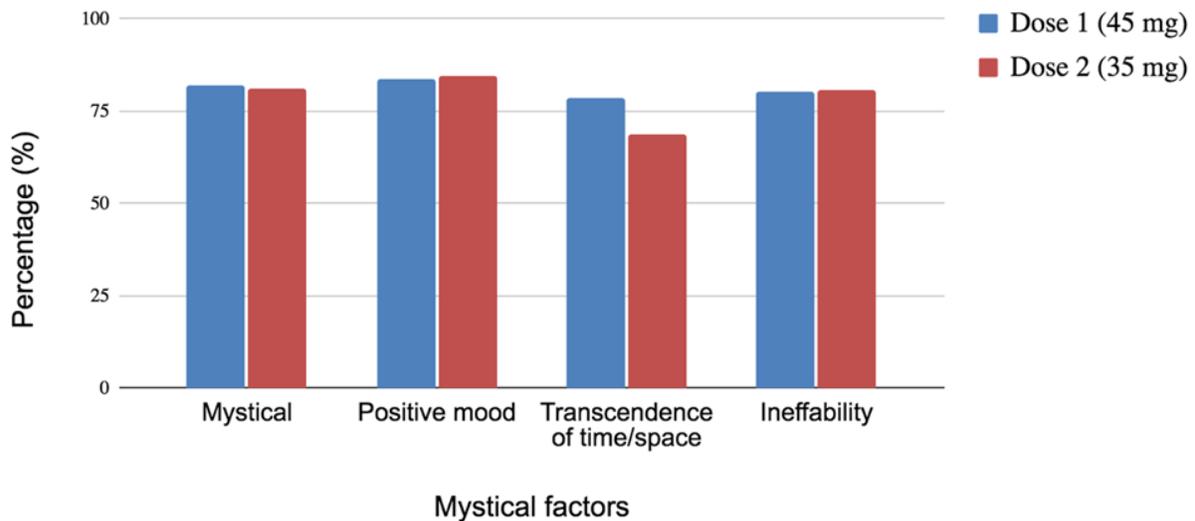


Figure 4. The total percentage of how mystical the participants found each experience with psilocybin, divided into each of the 4 factors of the MEQ. As evident in the graph, no large differences are notable between the two dosages of the factors (all roughly 1%), with the exception of the factor transcendence of time/space, which showed a clearer pattern of decrease over dosages (12.5% decrease). The percentages are, again, based on the total scores of all participants on the questions of the respective subscales, divided by the maximum total amount of points that each subscale has.

As the graph in figure 4 illustrates, the factors are similar across dosages. Whereas the subscales mystical and transcendence of time/space showed a decrease over the second dosage where less psilocybin was administered, positive mood and ineffability showed increases in the second dose.

Subscales of the mystical experience factor

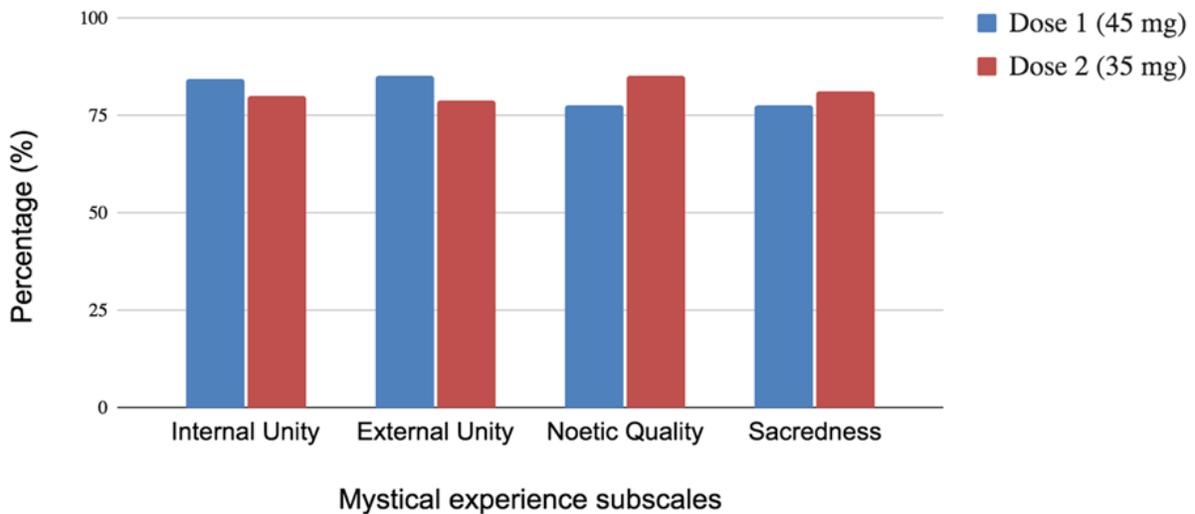


Figure 5. The total percentage of how mystical the participants found each experience with psilocybin, divided into each of the 4 subscales under the Mystical factor of the MEQ. Internal/external unity both decreased, whereas noetic quality and sacredness increased.

As demonstrated by the graph in figure 5, the specific subscales showed no general trend. While internal unity and external unity, pertaining to one's awareness with their consciousness and environment, decreased over the second dose, noetic quality and sacredness, which referred to the truthfulness and divineness of their experiences, increased for the second dosage. All sub factors had a change below 10%.

Qualitative - describing the main insight.

- *See myself what I am doing. See myself in a beautiful way.*
- *If we take good care of the earth, it will take good care of us. Real strength comes from vulnerability, authenticity, and connection.*
- *That I am, in general, a stable, calm, and happy spirit. Who knows how to stand his ground and respect my boundaries. Plus screaming relieved tension.*
- *If all is connected then there is no connection needed. All is One.*
- *Self-love and meaningful insights on things I want to change in my life.*
- *There is unity in all and everything.*
- *Let go and focus on things that matter in life. And everything is relative. Enjoy love and don't get stuck in loops :-)*
- *That all is energy and that we all live in our perfect hurricane with the beautiful eye where there is total peace and happiness. We truly connect through each other's eyes*



and we can overcome the storms (all our struggles and pain). This experience gives me so much confirmation and trust. Trust that I can rely on my own safety and power.

- *That I am very much stable/ in balance. Unlike I initially thought.*

Quality of the Experience 2

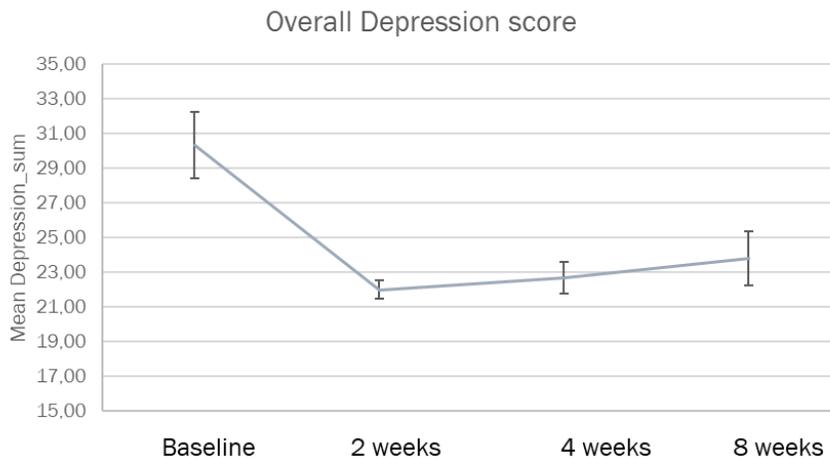
- 8 out of 9 participants believed it was necessary to have 2 experiences during the retreat
- 6 reported the first experience as equally as important
- 2 valued the first experience as more important and 1 valued the second more



3.0 Results

3.1 Decreased depressive symptoms

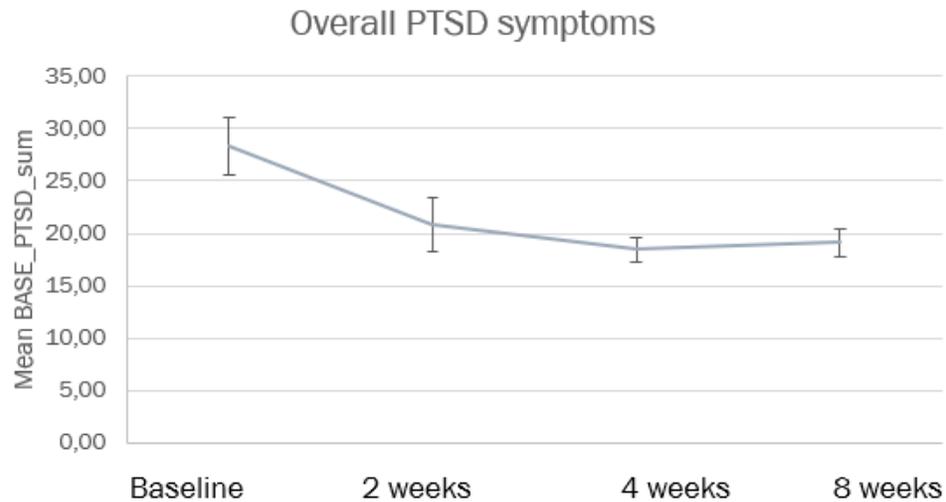
Responses to the Beck Depression Inventory (BDI, Appendix 1) showed that depressive symptoms were 23,91% lower than at baseline two weeks after the retreat. This decrease in depressive symptoms persisted as they were still 20,34% lower than baseline at 4 weeks and 19,99% lower than baseline at 2 months after the intervention.



The BDI scores were analysed using a repeated measures ANOVA with the within-subject factor of Time. This measured the effects on depressive symptoms at the different measuring points: Baseline, 2 weeks after, 4 weeks after and 2 months after the retreat. The factor Time had a significant effect on depression, ($F = 8,755$; $p < 0,001$). Post hoc analysis showed that depressive symptoms were significantly lowered between baseline ($M = 29,5$; $SD = 5,581$) and 2 weeks after the retreat ($M = 22,125$; $SD = 1,727$) ($t = 3,81$; $p = 0,005$). The difference was still significant after 4 weeks ($M = 22,625$; $SD = 2,925$) ($t = 3,014$; $p = 0,02$) and after 2 months ($M = 24,125$; $SD = 4,883$) ($t = 3,337$; $p = 0,01$).

3.0 Decrease in PTSD symptoms

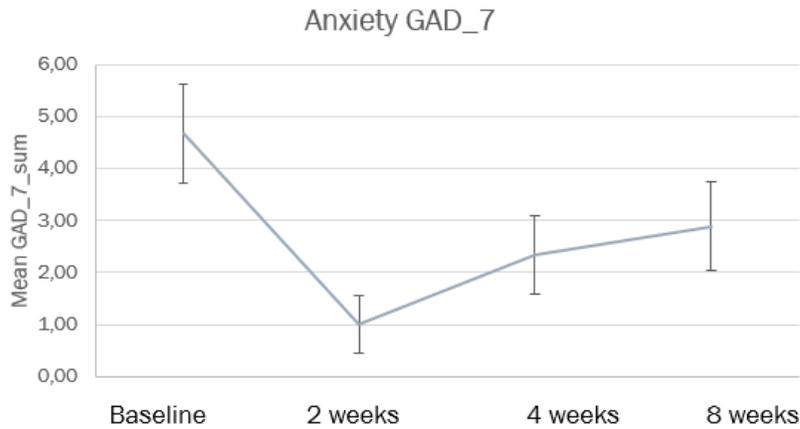
According to the PTSD questionnaire the PTSD score decreased with 25,9% after 2 weeks compared to the PTSD score at baseline. The improvement was still visible 4 weeks after the retreat with a 33,8% decrease in the PTSD score. After 2 months there was a slight increase to a 32,9% decrease compared to the PTSD score at baseline of the retreat.



The PTSD questionnaire data was analysed using a repeated measures ANOVA where the within-subject factor was Time. Again, the effects of Time on the reported PTSD score were measured for the 4 included timepoints. The factor time had a significant effect on the participants' PTSD score ($F = 4,960$; $p = 0,009$). Post hoc analysis showed that PTSD symptoms were significantly lowered between baseline ($M = 28,333$; $SD = 8,047$) and 2 weeks after the retreat ($M = 20,889$; $SD = 7,801$) ($t = 2,512$; $p = 0,036$). The difference was still significant after 4 weeks ($M = 18,750$; $SD = 3,694$) ($t = 3,720$; $p = 0,007$) and after 2 months ($M = 19,111$; $SD = 3,951$) ($t = 3,185$; $p = 0,013$).

3.0 Decrease in anxiety

According to the GAD-7 questionnaire the Anxiety score decreased with 78,6% after 2 weeks compared to the GAD-7 score at baseline. The improvement was still visible 4 weeks after the retreat with a 43,7% decrease in the GAD-7 score. After 2 months there was a decrease of 38,1% compared to the GAD-7 score at baseline of the retreat.

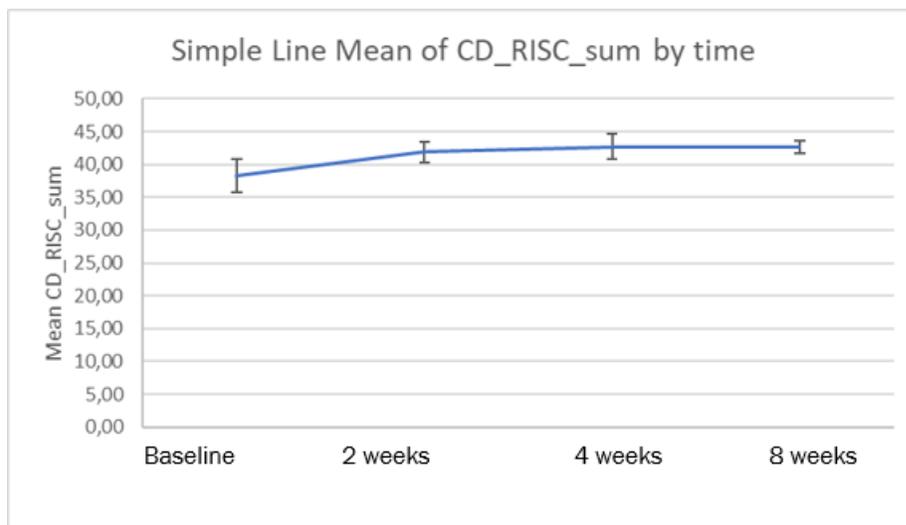


The GAD-7 data was analysed using a repeated measures ANOVA where the within-subject factor was Time. Again, the effects of Time on the reported GAD-7 score were measured for the 4 included timepoints. The factor time had a significant effect on the participants' anxiety ($F = 4,942$; $p = 0,009$). Post hoc analysis showed that anxiety symptoms were significantly lowered between baseline ($M = 4,667$; $SD = 2,872$) and 2 weeks after the retreat ($M = 1,000$; $SD = 1,658$) ($t = 3,830$; $p = 0,005$). The difference was still significant after 4 weeks ($M = 2,625$; $SD = 2,200$) ($t = 2,494$; $p = 0,041$). There was still a difference after 2 months ($M = 2,889$; $SD = 2,571$) ($t = 2,187$; $p = 0,060$) but the difference was not significant.

3.1

An improvement in resilience

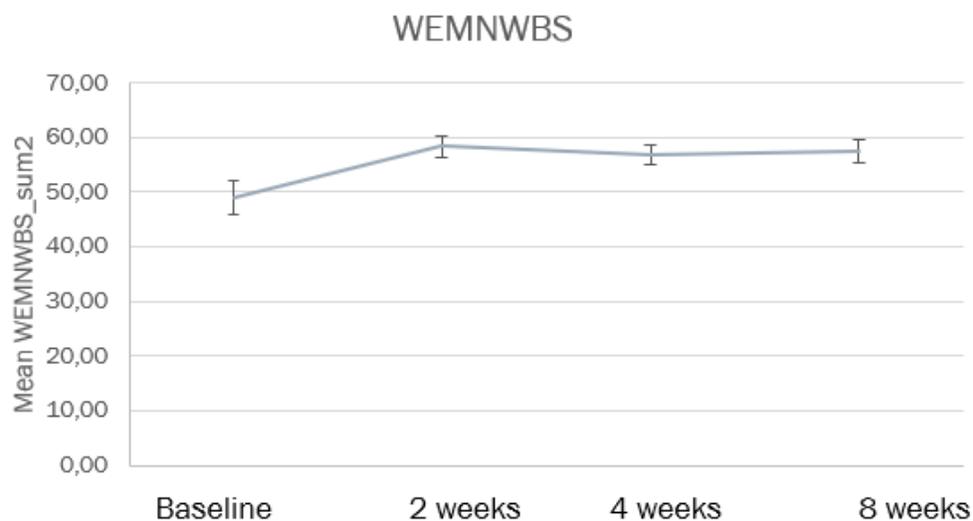
According to the responses of the Connor Davidson resilience scale (CD RISC), Participants' resilience was increased with 11,82% 2 weeks after the retreat compared to the baseline resilience score. The improved resilience was still visible 4 weeks after the retreat with an 11,00% increase and even rose further to an increase of 14,84% 2 months after the retreat compared to baseline.



CD RISC data was analysed using a repeated measures ANOVA where the within-subject factor was Time. Again, the effects of Time on the reported resilience score were measured for the 4 included timepoints. The factor time had a positive effect on the participants' resilience, however significance could not be proven ($F = 1,798$; $p = 0,178$). According to post hoc analysis the resilience was increased between baseline ($M = 39,125$; $SD = 7,827$) and 2 weeks after ($M = 41,875$; $SD = 4,883$), but significance of this difference could not be proven ($t = -2,006$; $p = 0,08$). The increase persisted but was still non-significant 4 weeks after ($M = 42,625$; $SD = 6,186$) ($t = -1,920$; $p = 0,096$) and 2 months after the retreat ($M = 42,125$; $SD = 2,748$) ($t = -1,829$; $p = 0,105$).

3.2 Increase in well-being

According to the Warnick-Edinburgh Mental Well-being Scale (WEMWBS) the participants well-being score increased with 19,0% after 2 weeks compared to the well score at baseline. The improvement was still visible 4 weeks after the retreat with a 16,6% increase in well-being. After 2 months there was a 17,2% increase in well-being compared to the well-being score at baseline.



The WEMWBS data was analysed using a repeated measures ANOVA where the within-subject factor was Time. Again, the effects of Time on the reported WEMWBS score were measured for the 4 included timepoints. The factor time had a significant effect on the participants' well-being ($F = 5,409$; $p = 0,006$). Post hoc analysis showed that anxiety symptoms were significantly lowered between baseline ($M = 49,000$; $SD = 9,631$) and 2 weeks after the retreat ($M = 58,333$; $SD = 5,612$) ($t = -2,707$; $p = 0,027$). The difference was still significant after 4 weeks ($M = 57,125$; $SD = 5,915$) ($t = -2,795$; $p = 0,027$) and after 2 months ($M = 57,444$; $SD = 6,579$) ($t = -3,807$; $p = 0,005$).

3.3 Increased feelings of connectedness with others

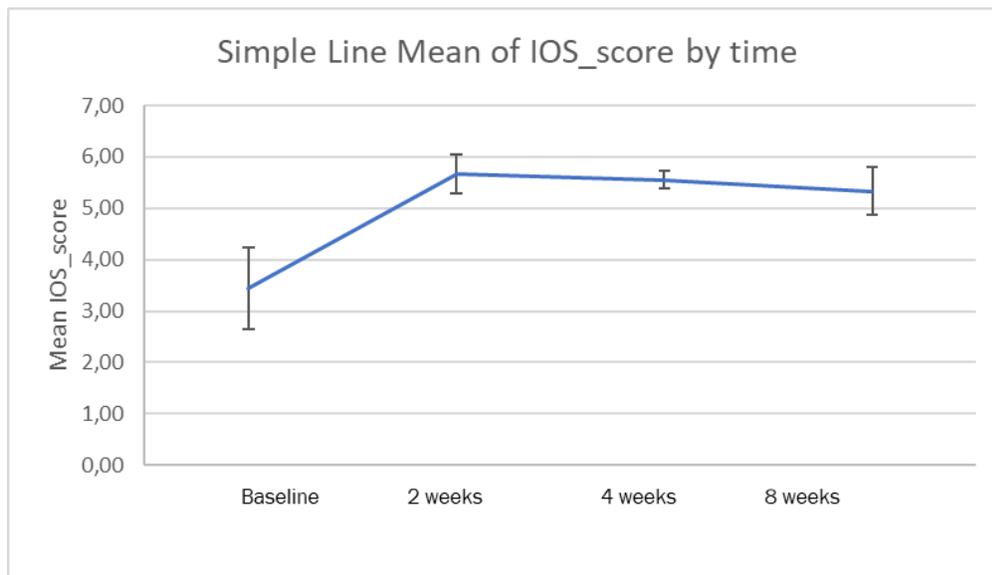
Participants' experience of connectedness with themselves and others grew drastically after the retreat. Scores for the Integration of self in others (IOS) survey more than doubled with 154,07% 2 weeks after the retreat compared to the baseline. This drastic increase in

connectedness remained as scores were still doubled with 124,38% 4 weeks after and 137,41% 2 months after the retreat compared to baseline.

Scores for the IOS survey were analysed using a repeated measures ANOVA. Time was used as the within-subject factor to evaluate the difference between the 4 measuring timepoints. The factor Time had a significant effect on the feelings of connectedness experienced by the participants ($F = 4,802$; $p = 0,011$). Post hoc analysis revealed that feelings of connectedness became significantly greater between baseline ($M = 3,75$; $SD = 2,375$) and 2 weeks after the retreat ($M = 5,750$; $SD = 1,165$) ($t = -3,255$; $SD = 0,012$). The difference remained but was not significant 4 weeks after the retreat ($M = 5,625$; $SD = 0,518$) ($t = -2,195$; $p = 0,064$). However, a significant increase was reached again 2 months after the retreat ($M = 5,375$; $SD = 1,506$) ($t = -3,091$; $p = 0,015$).

3.4 Better relationships with others and themselves

According to the relationships questionnaire the relationship score increased with 20,43% after 2 weeks compared to the relationship score at baseline. The improvement was still visible 4 weeks after the retreat with a 22,18% increase in the relationship score. After 2 months there was a 19,35% increase compared to the relationship score at baseline.



The relationship data was analysed using a repeated measures ANOVA where the within-subject factor was Time. Again, the effects of Time on the reported relationship score were measured for the 4 included timepoints. The factor time had an effect on the participants'

relationships but was not significant ($F = 1,348$; $p = 0,286$). Post hoc analysis showed that anxiety symptoms were not significant lowered between baseline ($M = 22,778$; $SD = 2,108$) and 2 weeks after the retreat ($M = 24,889$; $SD = 3,180$) ($t = -1,468$; $p = 0,180$). There was still a difference after 4 weeks ($M = 25,250$; $SD = 2,816$) ($t = -2,705$; $p = 0,077$) and after 2 months ($M = 24,667$; $SD = 2,062$) ($t = -2,054$; $p = 0,074$) both these differences were not significant.

4. Conclusion

The trend seen in all surveys is that after two weeks the results improve the most, these results diminish a little and then stabilize 2 months after the retreat. Because the results after two months are likely to stay the same over a long period of time this timepoint is used.

Decreased mental health disorder symptoms

It can be concluded from the results that the depressive symptoms, the PTSD symptoms and the anxiety symptoms of the participants were significantly reduced after the retreat. Analysis of the participants' survey answers showed a decrease in depressive, PTSD and anxiety symptoms.

The decrease in depressive symptoms of the participants was significant and after two months the BDI score was lowered to 24,125. Even though there was a decrease in the BDI score, the BDI score is still higher than the baseline BDI score for OEF/OIF Veterans in a Polytrauma Sample ($M=21,10$; $SD=11,76$). [13] However, the BDI scores of the participants decrease and become closer to the BDI baseline score of the OEF/OIF Veterans in the Polytrauma Sample.

The decrease in PTSD symptoms was significant and after two months the PTSD score was lower ($M=19,111$) than the PTSD score in U.S. military veterans ($M=31,0$). [14] This shows great success of the retreat regarding decreasing PTSD symptoms. Also the score goes towards trauma exposed college students which have self indicated that they had a stressful life event ($M=15,42$). [15]

The decrease in anxiety symptoms was significant and after two months the GAD-7 score was lower ($M= 2,889$) than the GAD-7 score of males ($M=3,01$) and females ($4,07$) in a large German general population sample. It was also lower than the whole population in the same study ($M=3,57$). [16]

Increased social health and well-being

It can be concluded from the results that social health and well-being of the participants improved or at least remained the same after the retreat. Analysis of participants' survey answers showed an increase in well-being, feelings of connectedness and relationships with others and a slight increase in self-reported resilience.

While the increase in resilience was small and significance could not be proven, the baseline resilience in these participants (Mean = 39,125) was higher than in a large Spanish population study (29,0). [17] and American veterans with PTSD and depression (Mean = 23,6). [18]

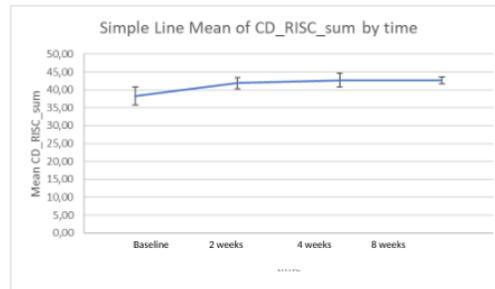
The well-being score of the participants increased significantly after the retreat indicating an improvement in positive feelings and mental health. The average WEMWBS score in this study rose from 49 at baseline to 57,44 two months after the retreat. A large health survey in the UK reported average WEMWBS scores of 51,7 for men and 51,6 for females [19], another large study in England and Scotland reported a median WEMWBS score of 51. [20] Thus, the average well-being of participants in this project increased from below the population average to well above it.

The feelings of connectedness with self and others improved drastically, indicated by the more than doubled IOS scores after the retreat. It should be considered that the IOS survey is a low-scoring survey with relatively small differences between the answers, making the IOS survey prone to relatively large differences within subjects. Nonetheless, the results here indicate that psilocybin can help war veterans to feel connected with themselves and the people surrounding them. This trend was also seen in the relationships survey, where the participants rated their relationship with others better after the retreat. Significance of this survey could not be proven, possibly due to the low sample size. It does indicate, however, that psilocybin might have positive effects on the connectedness and relationships of war veterans.

In short, it can be concluded from the results that the psilocybin retreat decreased negative feelings and symptoms for mental health disorders while the retreat increased positive feelings and social health.

Cognitive Resilience

Not a significant change in resilience, yet this is possibly because the scores were very high at baseline (ceiling level).



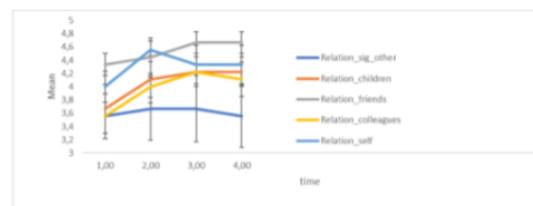
2 weeks
6.90537% increase
8 weeks
7.67263% increase

Relationships with others

Significant improvement in perception of closeness and similarity to other people at even 8 weeks follow-up. Meaning how close they relate to people generally.

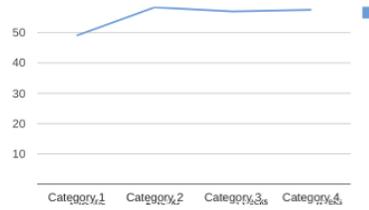


2 weeks
54.0541% change
8 weeks
43.2432% increase

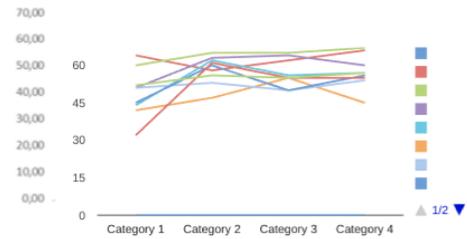


Improvement in wellbeing

- Very significant increase in ratings of wellbeing even at 8 weeks ($p = 0.006$)

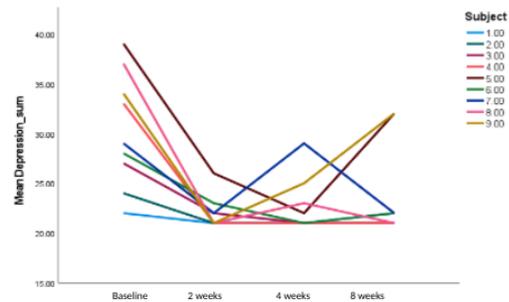
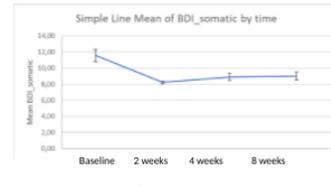
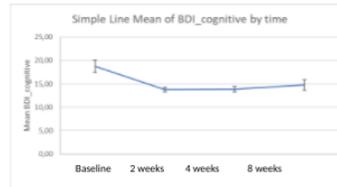


2 weeks
13.4585%change
8 weeks
11.5023%increase



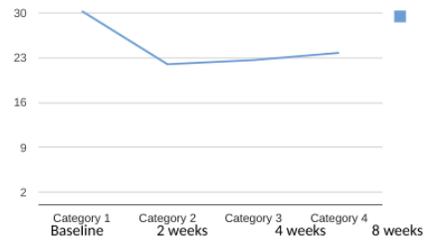
Depression

Very significant decrease in depression symptoms for both the cognitive and somatic domain ($P < 0,001$) (very large effect)



Depression

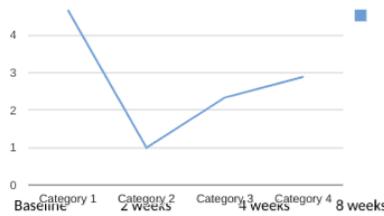
Very significant decrease in depression symptoms for both the cognitive and somatic domain ($P < 0,001$) (very large effect)



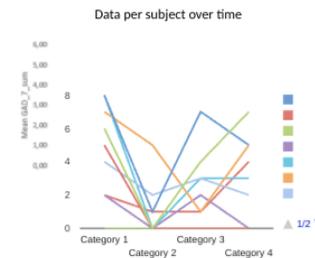
2 weeks
24.9831% decrease
8 weeks
18.3051% decrease

Reduction in Anxiety

Significant decrease in symptoms from two-weeks follow up and 4 weeks ($p = 0.007$) but non-significant at 8 weeks

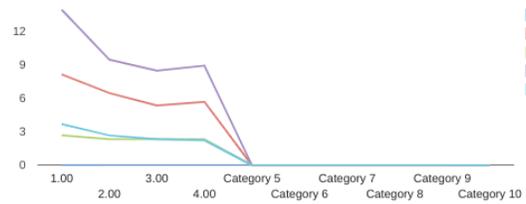
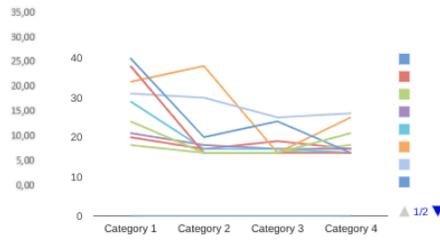


2 weeks later
-75.7576 % decrease
4 weeks later
-42.6407 % decrease
8 weeks
-29.6537% decrease



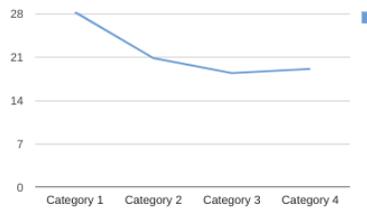
Reduction in PTSD

Most significant decrease was observed in reduction of negative thoughts & re-experiencing traumatic events.



Reduction in PTSD

- Very significant decrease in symptoms from
- two-weeks follow up all the way to 8 weeks ($p= 0.009$)



- **2 weeks**
- 22.5664% decrease
- **4 weeks**
- 31.0472% decrease

Review of the retreat experience

The participants were given an option to provide feedback on the retreat.

This is something that everybody, who is ready for it, should experience. It's a life changing experience for those who want to find their true self in themselves. No words can explain the experience, only by doing it you will find out. :-)

Words cannot describe how valuable this week has been to me. The insights I got and the group that was there were great.

Luc, his work is healing, connecting, inspiring, humorous, with a lot of love. I can advise everybody who is curious to understand themselves better. The only way out is within.

I was made aware of the magic in us. This setting was very powerful and filled with love and magic.

Don't be afraid of the unknown. Open your mind, body and soul. This is life changing in a good conscious manner. With positive side effects beyond your imagination. Just do it.

Dear all, The retreat, professionally organized by Luc and his team, is by far the most important experience in my life. I didn't have any experience with psychedelics or other things besides a cold beer. Therefore, I was a bit hesitant. The Team took great care of me. Together we set the right intention. During the trips they created a safe space. Never too little or too much attention, just right. A perfect setting of atmosphere, sound, and smell. This safe space allowed me to go full in. The first trip I deeply went into myself. Ended in a conscious space of Oneness. Words can not describe what I saw and experienced. The second trip was really different. So nice to have the Team around, they are so experienced. This trip was more external, in nature. The same feeling of Oneness but this time more "down to earth". It gave me a feeling of unconditional love. A clear feeling and deep knowing of direction in life. After each session you reflect on your experience. In a group setting and/or personally. What makes Luc and his team unique is that they also help you integrate the insight and lessons in your life. The whole retreat and experience cannot be expressed in terms of words, money, material or anything else. Just. Life changing. In absolute awe...

The retreat has taught me very valuable lessons about life and brought me inner peace as well as regained strength on a mental level. Luc and the team were extremely knowledgeable, understanding and compassionate. It's high time for our world leaders to join a retreat. :) Thank you all very much.

This retreat Luc and his staff organized gave me such intense and wonderful insights. I felt so safe during this retreat. The true love and honesty Luc and his team provided, were the base of this beautiful, intense, and life changing experience for me. Beautiful people! I can fully recommend Psychedelic Insights to everyone who's thinking about or wanting a journey to discover your true self, where true love, power and beautiful insights connect! Luc and the whole team, thank you so much!!!

About Psychedelic Insights and the study

Psychedelic Insights BV is a service that provides the psychological guidance for psychedelic experiences and integration therapy. CEO and founder Luc van Poelje (1969) is a psychedelic trip guide and a Royal Netherlands Marine Corps veteran. He and the Psychedelic Insights'



team have safely guided nearly 300 clients in private and group sessions with fresh psychedelic psilocybin truffles.

Is the currently legally available magic psilocybin truffle safe for therapy?

More study is needed and the road to normalized destigmatized informed free access is long. We want to see more people have access and awareness around these legal, intense, but safe guided experiences with psilocybin truffles.

Its use is not limited to medical or mental health issues. But it is a route back to normalizing psychedelics and

their healing and consciousness expanding properties: The magic psilocybin truffles have an official EU food safety certification.

“The US Food & Drug Administration is helping to speed up the process of researching and approving psilocybin, a hallucinogenic substance in magic mushrooms, to treat major depressive disorder (MDD). The FDA has designated psilocybin therapy — currently being tested in clinical trials — as "breakthrough therapy," an action that is meant to accelerate the typically sluggish process of drug development and review.



One of the reasons could be the need to consume psychedelics in a therapeutic setting. These drugs should be used in a controlled set and setting to be effective. This requires ensuring that professional help and facilities are trained and ready for effective therapy, which opens the door to privately-owned companies and retreats (truffle.report).

Psilocybin, with a single dose, could profoundly impact the brain and have long-lasting impacts after wiping away depressive symptoms, according to the statement.” (source: livescience.com).

Why veterans?

With a number of veterans among the Psychedelic Insights trip guides and all having first hand experience of the power of natural, plant and fungi medicines, it lies close to our hearts. Veterans are under-served therapeutically in society. Because of the work we do we realise that actual real change is possible in many people’s lives. Especially in the veteran community Luc, a veteran himself, sees many friends suffer in different ways. However, these types of psychedelic experiences are not for everyone. And yes, there are a lot of misconceptions and stigma about its effect, the risks and its potential. But those who must and are ready find a way. The irony is special operations forces members use plant medicines to deal with their experiences, but in secrecy. We want to create awareness, community and safe access.

We aim to host or conduct more research in the future. With partners like [Veterans of War](#), and [Heroic Hearts](#) - a veteran organization that connects military and emergency services veterans struggling with mental trauma to pioneering therapy services in the UK and psychedelic retreats around the world. Other organizations support our initiative for more research with [The 1000 Vets](#) project. This study was the pilot for that [project](#) (Psychedelic Warriors), with the aim to use the project to promote open dialogues around working with psychedelics, to share insights and new findings, and to stimulate innovation, access and education.

We need to let those veterans who have had these experiences, speak. So for this reason, we are making a [documentary](#) about the retreat.

The team

Our [team](#) has grown. We choose to work with authentic and unique individuals who form our trans-disciplinary team. Psychedelic Insight facilitators come from varying scientific, psychological, psycho-therapeutic, and international and cultural backgrounds and, together, we form a stable, passionate, and warmhearted team, to provide each client with the best opportunity to benefit from the potential of psilocybin.

Mission

“Our mission is to help people enhance personal growth and development through a well prepared safe set and private or group setting for psychedelic assisted experiences.

We innovate personal transformation to accelerate the tipping-point of human consciousness.”

VI – Extra data for the documentary

a. Baseline variables

Professions of Participants

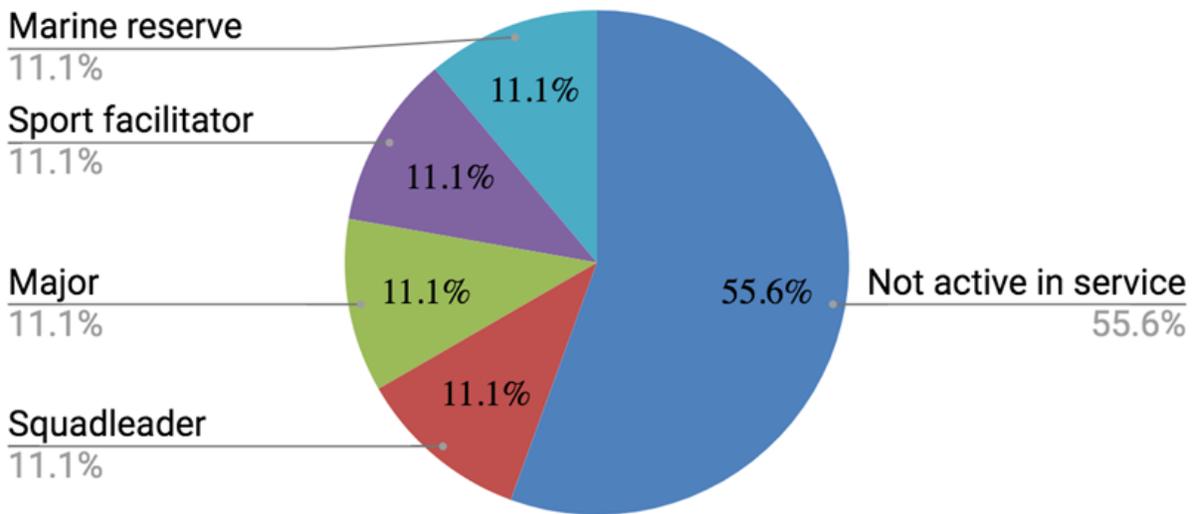
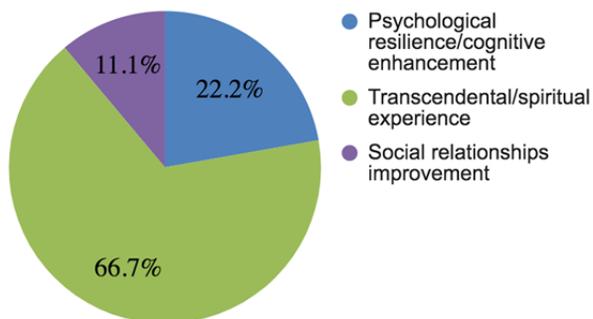


Figure 7. All but one of the participants in the study were male, and the ages of the participants were dispersed equally between the ranges of 30-60 years.

Reason for Retreat



Previous use of psychedelics among participants

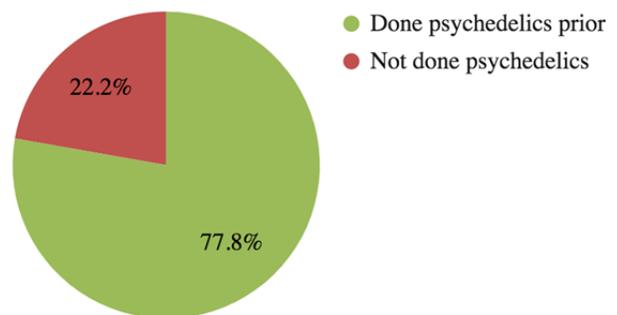


Figure 8. The majority of the participants joined the retreat hoping to get transcendental/spiritual experience out, 2 joined for psychological resilience and cognitive enhancement, and 1 for the improvement of social relationships. The majority of the participants had experienced with psychedelics beforehand, albeit not regularly. Of those that had done psychedelics, Ayahuasca (DMT), and truffles (psilocybin) were the most common.

b. Outcome variables

How often participants still think about their psychedelic experience 4 weeks post retreat

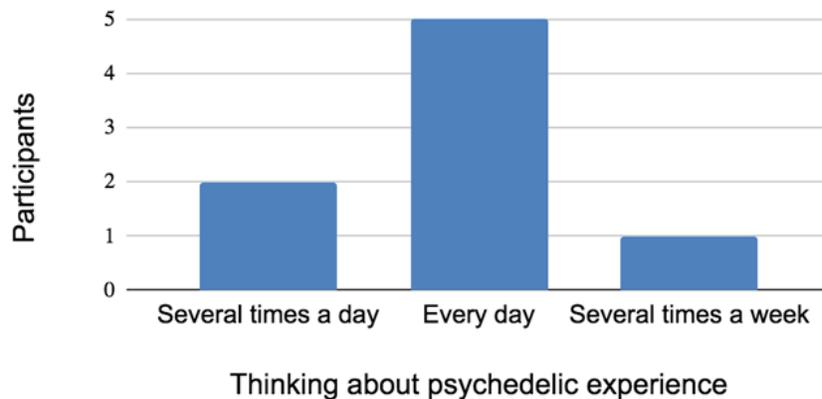
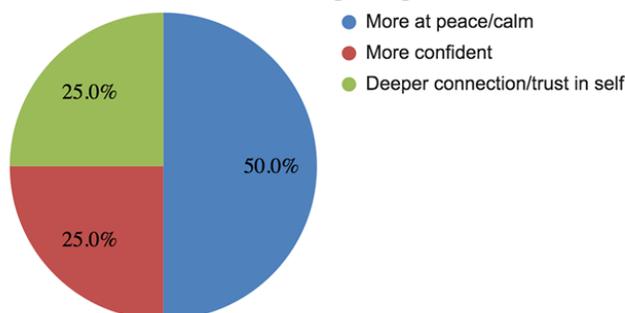


Figure 8. 8 of the participants that were followed up 4 weeks later all reported regularly thinking about their psychedelic experience. Of the 8, 5 of them still thought about their experience on a daily basis.

Outcomes of the retreat for the participants



Percentage of participants recommending retreat

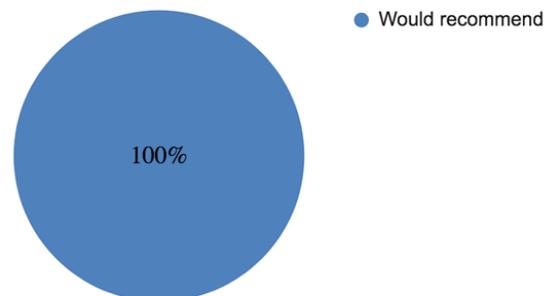


Figure 9. Only positive outcomes of the retreat were reported for the 8 veterans that were followed up 4 weeks later. Roughly half reported feeling more peaceful, and the rest were more



confident, and had a deeper connection and trust in themself. In fact, all of the 8 participants would recommend the retreat to other veterans, showing an overall positive outlook.