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# An Interpretative Phenomenological Analysis of the use of psilocybin by veterans with symptoms of trauma

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## Abstract

Veterans are at increased risk of experiencing symptoms of trauma. Although many benefit from available treatments, some find treatment inaccessible or ineffective and explore alternative substances. One such substance is psilocybin. This Interpretative Phenomenological Analysis study aimed to provide an initial insight into the experiences of veterans who have used or have considered using psilocybin and their perspectives regarding the acceptability of it as a treatment for their self-reported symptoms of trauma. Seven veterans with current or historic trauma symptoms were interviewed. All participants had either used or considered using psilocybin to alleviate their symptoms. All participants reported perceiving barriers when accessing treatment with many considering psilocybin out of desperation. All participants who had used psilocybin reported immediate and long-term improvements in their symptomatology. The study suggests that some perceive current treatments as ineffective and/or inaccessible, leading to the consideration of alternatives, such as psilocybin. The immediate and long-term symptom reductions reported suggest it may be a viable treatment option for symptoms of trauma for some. However, further research and clinical trials are required to form conclusions on the therapeutic potential of psilocybin for this group.

## Keywords

psychedelics, trauma, veterans, ex-armed forces, psilocybin

## Introduction

Although the majority of veterans (i.e. those who have previously served in the armed forces) reintegrate successfully into civilian life, a number struggle with the transition and can experience mental health problems (Iversen and Greenberg, 2009). For example, Seal et al. (2007) found that 25% of the 103,788 veterans in their sample reported experiencing at least one mental health issue. One of the most commonly reported mental health problems amongst veterans is post traumatic stress disorder (PTSD) (Trivedi et al., 2015). This is an anxiety disorder characterised by severe and persistent psychological distress associated with memories of traumatic experiences (World Health Organisation, 2018) and it is estimated that 5–30% of veterans experience it (Lapierre et al., 2007; Ramchand et al., 2010), compared to 3.9% of the general population (Koenen et al., 2017). Some research suggests that the prevalence of PTSD differs between UK and US veterans (Richardson et al., 2010), however a meta-analysis found rates are largely similar when sampling methods are accounted for (Kok et al., 2012). Symptoms of trauma are also prevalent at a subclinical level in veterans without a

PTSD diagnosis (Holowka et al., 2012) and can have a significant negative impact on veterans' family relationships (Ray and Vanstone, 2009) and physical health (Asnaani et al., 2014). Individuals with PTSD are also six times more likely to die by suicide (Tarrier and Gregg, 2004).

Medications for PTSD (such as SSRIs-selective serotonin reuptake inhibitor antidepressants) have been found to be less effective in veterans compared to the general population (Watts et al., 2013). The meta-analysis by Watts et al. (2013) also found psychotherapy (such as

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cognitive-behavioural therapy) was more effective than medication for PTSD. This has been echoed by Steenkamp et al. (2015) who conducted a review of randomised control trials examining the effectiveness of psychotherapy in 883 veterans. It was concluded that although psychotherapy alleviated PTSD symptoms, between 60% and 72% of participants retained their diagnosis following therapy. This suggests that, although some veterans benefit from psychotherapy, it rarely provides a cure. Additionally, smaller treatment effect sizes for psychotherapy for PTSD have been found for veterans compared to the general population (Goodson et al., 2011) and it has been suggested that this may be due to therapies not targeting symptoms such as guilt which may be more common in veterans (Sharpless and Barber, 2011).

However, only a minority of veterans with PTSD receive mental health treatment (Hoge et al., 2004). Qualitative studies have found that veterans may not seek support as they feel unable to talk about their symptoms and experiences (Visco, 2009), do not trust mental health professionals (Britt et al., 2011) and fear stigmatisation (Greene-Shortridge et al., 2007). The limited effectiveness of treatment options for veterans with PTSD, alongside the help-seeking barriers that some perceive, highlight the usefulness of exploring alternative options. One such option may be the integration of psychedelics into treatment for trauma as it has been suggested that this may overcome some of the limitations of current options (Averill and Abdallah, 2022; Krediet et al., 2020).

Psychedelics are substances that produce an altered state of consciousness (Carod-Artal, 2015). Examples include ayahuasca (a psychedelic used by indigenous populations containing DMT-N,N-dimethyltryptamine and a monoamine oxidase inhibitor), 3,4-Methylenedioxy-Methamphetamine (MDMA, commonly called ecstasy), and 4-phosphorioloxyn (psilocybin, the active ingredient in over 100 species of 'magic' mushrooms; Nichols, 2016). A growing evidence base supports the hypothesis that psychedelics have therapeutic potential for mental illness (Nutt et al., 2020). For example, administering MDMA (in the context of two eight-hour therapy sessions) to 12 participants with treatment-resistant PTSD has been found to be associated with significant reductions in symptomatology and 83% of treated participants no longer met the criteria for PTSD following the study (Mithoefer et al., 2011). The researchers suggested that the positive effects were due to MDMA allowing participants to experience less fear when discussing their traumatic experiences and increasing participants' trust in therapists (Mithoefer et al., 2011). The most recent randomised, double-blind, placebo-controlled, multi-site phase three clinical trial from Multidisciplinary Association for Psychedelic Studies (MAPS) included 90 participants (44 received therapy plus a placebo and 46 received therapy and MDMA) and showed clear benefit of MDMA assisted therapy for

patients with severe PTSD (Mitchell et al., 2021). Increased openness (MacLean et al., 2011), connectedness and acceptance (Watts et al., 2017) are also associated with psilocybin. This may be particularly relevant to veterans, who report difficulties trusting mental health professionals (Britt et al., 2011) and discussing their experiences (Visco, 2009).

Support for the suggestion that psilocybin may be effective in treating trauma also comes from its therapeutic success with other mental health conditions where there is commonality in some of the symptoms experienced. For example, it has been found to significantly reduce levels of depression and anxiety in 12 individuals with terminal illness (Grob et al., 2011). Additionally, Moreno et al. (2006) found that up to four doses of psilocybin significantly reduced symptoms of Obsessive Compulsive Disorder (OCD) in all nine participants with diagnosed treatment-resistant OCD. Participants reported symptom reductions for up to six months following treatment. Psilocybin assisted therapy has also been effective in reducing symptoms in individuals with treatment-resistant depression (Carhart-Harris et al., 2016), an effect sustained for up to six months (Carhart-Harris et al., 2018). Most recently, it was shown to be as effective as Escitalopram in the primary outcome depression score in a double-blind randomised controlled trial with increased effectiveness in the secondary outcome measures in 30 depressed patients (Carhart-Harris et al., 2021).

The small sample sizes common in psychedelic research limit the generalisability of results (Dos Santos et al., 2016). Small sample sizes are largely due to legal implications. Specifically, psilocybin was classified as a Schedule 1 substance in the UK 1971 act (*Misuse of Drugs Act 1971*). This classification assumes that the substance produces harmful effects and has no medical benefit; emerging evidence suggests this may not be correct. The scheduling imposes legal ramifications (such as lengthy prison sentences) for possession of the substance and impedes research (Howard et al., 2021; Nutt et al., 2013). These barriers have resulted in uncertainty surrounding the impact of psilocybin on other mental illnesses, such as PTSD (Nutt et al., 2013; Varker et al., 2021). Nevertheless, research suggests that some veterans choose to self-medicate with psychedelics (Cameron et al., 2020) and exploring why they choose this option, rather than accessing other available treatments, is important to understand. The current study aimed to qualitatively explore the experiences of veterans who have used or considered using psilocybin and their thoughts regarding the acceptability of it as a treatment for their symptoms of trauma.

## Methods

An Interpretative Phenomenological Analysis (IPA) approach was chosen to explore this complex and sensitive

topic in order to understand how veterans made sense of their experiences relating to psilocybin. It has been suggested that IPA is particularly useful when researching emotional subjects (Smith and Osborn, 2015). This approach aims to gain access into participants' internal world whilst acknowledging that a direct, objective understanding is not possible in the absence of researchers' pre-conceived ideas (Smith, 2003).

### Participants

The research team sought to recruit a maximum of 10 participants to enable an in-depth analysis of participants' accounts, a sample size suitable in IPA (Coyle, 2014). Participants were eligible to take part if they were veterans, over the age of 18, with self-reported current or historic PTSD symptoms, who reported having either used or considered using psilocybin. Purposive and snowballing sampling was used to recruit participants for whom the topic under consideration was personally significant. Participants were initially identified through existing networks and contacts of the research team (JCN, an experienced drug science researcher).

### Materials

A topic guide was developed to facilitate the interviews based on the literature. The guide contained prompts for the interviewer but was used only as a guide so that participants could talk freely about their experiences and perspectives. Areas to explore with participants included their symptoms of trauma and treatments or therapies they had tried, their knowledge of and/or experiences with psilocybin and what impact this had on their symptoms, and exploration around their thoughts regarding scheduling of the drug.

### Procedure

Participants were initially approached via email by JCN and provided with information about the study and had a number of opportunities to discuss the study with members of the research team prior to taking part. All participants provided informed consent before being interviewed. Individual semi-structured interviews were conducted between March and June 2020 remotely using audio-only video calls and were conducted by FLS with VW present on the calls to provide support to participants if needed (none required this). Interviews were audio recorded using an encrypted Dictaphone and transcribed verbatim. Participants were assigned a pseudonym and any identifiable information removed from the transcripts.

### Ethical considerations

The study was approved by the University of Manchester Ethics Committee (Reference 2020-8417-13701).

### Data analysis

Transcripts were analysed using IPA by FLS. The analysis comprised the following steps (Pietkiewicz and Smith, 2014): looking at each transcript individually, the researcher first noted their initial thoughts and observations about the semantic content of the interviews and language used; each was then read again with a view to developing initial thoughts and notes into more specific themes/phrases. Themes were refined and grouped by looking at relationships between them and close interaction (moving back and forth) between the transcript and the researcher's interpretation of what the participant was saying to produce a table of themes and associated data extracts. This process was repeated for each interview to enable a comparison of themes across the dataset and to identify similarities and differences between interviews. Transcripts were also read by VW (an experienced qualitative researcher who was involved in the design and conduct of the study throughout) and the final themes discussed and agreed.

### Reflexivity

Reflection allows the researcher to become aware of their interpretative framework, which may bias the meaning drawn from the data (Smith, 2003). Awareness of such bias should help reduce the extent to which the analysis is influenced by preconceptions about the direction of the research and acknowledges that researcher characteristics have the potential to influence data (Storey, 2007). For instance, research suggests that gender can influence the information and emotions disclosed by participants (Broom et al., 2009). Interviews were conducted and the analysis led by FS, a female with no military experience; this likely reduced the level of identification between the researcher and participants and influenced some of the meanings attached to the data during analysis.

### Results

Eighteen participants were approached to take part in the study. Eleven participants did not respond to the invitation and seven participated. Interviews lasted between 24 and 57 min, with an average duration of 40 min. The sample were all male, aged between 28 and 48, with a mean age of 33. Six participants were British and one American.

Five participants had previously taken psilocybin (three purely for their symptoms and two recreationally as well as for their symptoms) and two had considered taking it. How participants accessed psilocybin for the first time varied, for instance some travelled abroad while others had foraged or had purchased the drug from a 'dealer'. Similarly, the environments they took the drug varied; some stated it was important for them to take the substance outside in a natural setting, or in the presence of another person,

whereas others took the substance inside or alone. Although the study focused on psilocybin, most participants also had experience with other psychedelics (such as ayahuasca and MDMA) which were discussed as part of their narratives. No further demographic information was sought from participants.

Three themes were identified that answered the research question specifically and were considered the most salient for participants: a dislike for prescribed medication, desperation as a facilitator to using psychedelics and immediate and long-term benefits of psychedelics. Themes are presented with illustrative quotations using pseudonyms.

### *Dislike for prescribed medication*

All participants reported experiencing barriers in accessing treatment. Commonly discussed barriers included experiences of shame or guilt and long waiting lists for therapies. A dislike for prescribed medication was discussed by all participants.

Harry's dislike for medication was due to first-hand experience. Harry stated: 'the way that it made me feel physically, there was something that was very unpleasant about it ... it was just as bad as what my symptoms were'. Harry's description of his experience being 'very unpleasant' conveys his dislike of the negative side effects he experienced whilst taking medication but could also suggest he did not like the synthetic nature of the medication. This is further implied by his comment that he would be 'less inclined' to take MDMA 'because that is a lab-developed drug'.

A dislike for the side effects was also evident in Lewis's narrative: 'having these kind of side effects in black and white saying that it might increase suicidal ideation ... it was quite a frightening, destabilising experience'. The adjectives 'frightening' and 'destabilising' highlight Lewis's fear of the side effects. This may have been particularly scary for Lewis due to the experiences of suicidal ideation he had earlier reported.

In contrast, Tom's dislike for medication was not based on personal experience:

'I didn't want to go onto antidepressants, because I've had a lot of friends who have been on antidepressants and all of the other pills they give you and all I've seen is them mess them up worse than when they started them.'

This suggests that for Tom, witnessing his friends' experiences of medication made him reluctant to choose this option and again implies a level of fear ('mess them up worse'). His comment 'all of the other pills they give you' also conveys a lack of care. The verb 'give' implies a lack of choice or desire from the receiver of the medication. Further, his use of the pronoun 'they' could convey a sense of separation, which could reflect his distrust of (presumably) mental health professionals.

Chris also expressed a dislike for taking prescribed medication. He stated: 'the military pushes the idea that drugs are bad and not to be reliant on them, and the prospect of being on long-term medication didn't really sit very well with me'. Although Chris's feelings of not wanting to take medication are similar to those voiced by other participants, his reasons seemed to stem more from his military service.

Chris further commented:

'... not very many people who I am aware of in the military are very interested in taking antidepressants long-term, there's a lot of shame associated with that ... it's appealing that psilocybin could be a treatment that would work with a with a singular, you know, it happens once and then you're just, that's it, you're treated ... that appeals to me and I think that that would appeal to service personnel and make them a lot more likely to seek help.'

For Chris, the issue of shame and dislike of daily, long-term medication seemingly stemming from his military service, made the single dose potential of psilocybin more attractive.

Participants' collective dislike for prescribed medication would have limited the number of treatment options they felt were available to them. As a consequence, psilocybin may have appeared more accessible, despite its illegality.

### *Desperation as a facilitator to using psychedelics*

Reasons behind wanting to try psilocybin varied. Common themes included self-medication, research, and recreational use. Desperation as a facilitator to using psychedelics was common to all but one participant.

Desperation was often associated with the perceived severity of participants' symptoms and unsuccessful treatment attempts. When asked why he decided to use psilocybin, Lewis stated: 'total desperation really, sort of just being back against the wall ... so it was sort of well everything else has failed, so why not this? ... what do I have to lose at this point?'. Lewis's statement 'everything else has failed' highlights his previous attempts at treating his trauma symptoms - he had earlier reported trying various medications and therapies with limited benefit. His description also conveys a sense of hopelessness from running out of options. His rhetorical question 'what do I have to lose at this point?' suggests that the combination of how negatively his symptoms impacted him and unsuccessful treatment attempts to relieve his suffering, formed his motivation to try psilocybin.

Desperation was also evident in Harry's decision to try the psychedelic ayahuasca: 'I had become very frustrated with the lack of options available to me, and I had nowhere else to go'. Harry's turning to ayahuasca after feeling he had 'nowhere else to go' parallels Lewis' decision to try psilocybin.

Luke had not previously taken psilocybin and was the only participant who had never taken a psychedelic. Luke described being ‘very desperate’. He later said: ‘I would be willing to try it because I would be willing to try anything at the moment’. Like Harry and Lewis, Luke’s feelings of desperation stemmed from the severity of his symptoms and limited success of treatment interventions already tried.

The negative effect Luke’s symptomatology had on him was evident from his comment: ‘I wouldn’t care if anything happened to me tomorrow’. Luke’s desire to try psilocybin was driven in part by seeing the positive impact it had had on his son, who: ‘gets up every morning and enjoys life to the full every day’, adding: ‘and that is down, he reckons, to psilocybin’. Luke later commented: ‘I could really do with trying something different’, suggesting the limited success of previous treatments also contributed to his motivation.

### *Immediate and long-term benefits*

All participants who had used psilocybin reported beneficial effects from it with them reporting effects as both immediate and long-lasting. This theme seemed to be strongly associated with a change of perception, learning and symptom reduction.

When Nick discussed the effects psilocybin had on him, he stated: ‘It did give me a real focus and perspective’. The ditransitive verb ‘give’, and the way in which Nick makes himself the object rather than the subject of the sentence, implies that the process through which Nick received this ‘focus and perspective’ was effortless and immediate.

Nick later stated: ‘at the end, after a few epiphanies and stuff like that it was like wow I am ready to leave my PTSD behind’. Nick’s outcome of feeling able to leave his self-reported PTSD behind, highlights the value of this experience, especially considering that Nick had reported suffering from symptoms for over five years. The idea of leaving something behind also conveys a sense of permanence, implying the experience resulted in long-term recovery. This could be considered especially powerful given the number of treatments Nick reported having tried before psilocybin, including talking therapies, meditation and medication.

When expanding on the effects psilocybin (and other psychedelics) had on his symptoms, Nick stated:

‘there’s just no such thing for me as PTSD anymore ... if you use psychedelics, you can walk all over it, look at it at the floor around you and then just choose to scoop up all those piles of trauma and stuff, put it in a folder and it’s up to you, you can carry that around with you or not.’

The image Nick portrays of looking at his self-reported PTSD on the floor suggests the experience afforded him a sense of dissociation between himself and his trauma. The

quotation: ‘choose to scoop up all those piles of trauma ... it’s up to you’ also conveys a sense of power and choice. This contrasts with Nick’s earlier description of his symptoms: ‘fight or flight sort of would kick in and overtake the brain’ which highlights the lack of control Nick perceived having over his symptoms. Nick’s experience with psychedelics seemed to allow him to gain control over, and distance himself, from his symptoms.

Immediate and long-lasting benefits were also evident in Harry’s experience with ayahuasca:

‘I received insight into the way that my mind worked ... I became aware, or I was taught pretty much, the way that I experienced it was that I was, that I was taught how my mind behaved and how I could change that behaviour and suffer less because of it. So it was incredibly valuable; life changing.’

The verbs ‘received’ and ‘taught’ parallel Nick’s description of being ‘given’ focus and perspective in that the verbs also imply an effortless process in which Harry was receiving insight and awareness. The idea of being taught also implies a long-term change in knowledge. For Harry, it seemed that this knowledge related to how his mind worked and how he could change his behaviour. This differs slightly from Nick’s reported change in ‘focus and perspective’. Harry later mentioned that he had not gained this level of insight through psychotherapy.

For James, psilocybin: ‘just made me see the world differently, ever after’. This communicates a feeling of permanence and shift in perspective. The effects of psilocybin being immediate were also evident in James’s reply when asked how soon he saw the effects of psilocybin on his symptoms: ‘I would say almost immediately’.

When expanding on the effects of psilocybin, James commented:

‘that alone changed everything in my life ... it downloaded this information into my brain and... that download has kind of expanded, or kind of un-zipped like a zip file on a computer and just given me more and more fruit and knowledge.’

Although this expansion of knowledge was not mentioned by Nick, it was by Tom (about his experience with MDMA) and by Harry (about his experience with ayahuasca). James’s reference to downloading information into his brain implies a permanent change in his perception and is similar to Nick’s description of psilocybin giving him ‘focus and perspective’, both implying a permanent and immediate change.

Long-lasting change was evident in all interviews with participants who had used psychedelics. Four of the five who had taken psychedelics reported they would again, but all reported that this would be more for self-exploration

than a desperate need, further suggestive of the healing they felt had been achieved through a single use.

## Discussion

The current study aimed to understand veterans' experiences when accessing treatment for trauma symptoms and why they may consider using psilocybin. Additionally, the study aimed to explore veterans' perceptions of their experiences with psilocybin and the perceived effect it had on their trauma symptoms. The study found that participants experienced barriers in accessing traditional treatment, often in relation to disliking prescribed medications. Desperation as a facilitator to using psychedelics was common to all but one participant, suggesting that psilocybin was often used as a consequence of perceiving limited alternative options. All participants who had tried psilocybin reported it having beneficial effects on their trauma symptoms. Participants described the effects as both immediate and long-term, which contrasted with the way in which many described their experiences with previous forms of treatment.

A dislike for prescribed medication was mentioned by all participants and has previously been found in 12% of a sample of 120 veterans as a reason for not wanting to seek mental health treatment (Britt et al., 2011). In the current study, a dislike for prescribed medication was often discussed in relation to its negative side effects. This is consistent with research suggesting that many currently available treatments for trauma (such as SSRIs) can incur negative side effects for some users (Ahearn et al., 2011). Kroesen et al. (2002) also found a dislike for medication was the most common reason for choosing alternative treatment options in a qualitative study of 100 veterans. Like the current study, veterans reported not liking the synthetic nature and side effects of prescribed medication. It is possible that because of previous experiences with prescribed medication, veterans may be motivated to explore natural options.

Some individuals may also have an inherent preference for natural medication. This is further suggested by the fact that one participant tried ayahuasca (a plant-based psychedelic) before exploring prescribed options. Research has found that some individuals perceive plant-derived medication as less dangerous and carrying fewer side effects than synthetic medication (Giveon et al., 2004). Although therapy is also recommended for PTSD, some veterans experience barriers in accessing it (Britt et al., 2011) or do not benefit from it (Goodson et al., 2011). Therefore, it is reasonable that some veterans may perceive both therapy and medication as inaccessible and that consequently, despite its illegality, psilocybin may be a more attractive option as it is natural and does not require daily dosing (meaning any side effects would be temporary).

Desperation as a facilitator to using psychedelics was common to all but one participant. Participants' desperation

was often, but not always, cited as having stemmed from previous failed attempts at treatment. Desperation has previously been found to be a facilitator to trying psilocybin in individuals experiencing chronic migraines (Andersson et al., 2017). The researchers found that desperation stemmed from previous unsuccessful treatment attempts and a lack of belief in the medical system. Participants' negative experiences with, and perceptions of, available treatment options may have led to feelings of desperation and to them considering psilocybin, despite the possible negative implications resulting from its illegality. Participants in the current study may not represent the majority of veterans experiencing trauma symptoms, as research suggests that most veterans do benefit from PTSD treatment, such as cognitive processing therapy (Steenkamp et al., 2015) and medication such as prazosin (Raskind et al., 2013). However, there are still a significant number of people (particularly veterans; Watts et al., 2013) who do not benefit from available options (Krystal et al., 2017). Not benefitting from available treatment options could lead to feelings of desperation and a desire to explore alternative treatments for some. Desperation could be a particular motivator for those experiencing PTSD symptoms due to the associations between PTSD and suicide amongst veterans (Jakupcak et al., 2009). Equally, others may instead decide to explore psychedelics first if they appear a more attractive option; for instance, by those who do not wish to take synthetic medication or who feel unable to discuss their symptoms in therapy.

The symptom reductions reported by participants are consistent with an emerging evidence base suggesting psilocybin can alleviate symptoms of mental illness (Dos Santos et al., 2016; Goldberg et al., 2020; Nutt et al., 2020; Varker et al., 2021). Although research suggests that other psychedelic substances may be effective in treating symptoms of trauma (Davis et al., 2020; Mithoefer et al., 2013), the effects of psilocybin are yet to be clinically tested. However, the substance is due to be tested at a stage two clinical trial exploring the safety of psilocybin in individuals with diagnosed PTSD, where the researchers will also explore the effect psilocybin has on participants' PTSD symptoms (COMPASS pathways, NCT05312151). Studies examining the use of psilocybin as an alternative treatment for veterans experiencing PTSD have also recently been approved by the Texas House Committee (Texas House Committee, 2021), supporting further clinical research in the area. The current study also supports clinical investigation of psilocybin in veterans to treat their trauma symptoms. The most prevalent theme concerning the effects of psilocybin was the immediate and long-term benefits of the drug. Participants reported symptom reduction (including anxiety and depression), a change of perspective and feelings of connectedness. This is consistent with literature suggesting psilocybin leads to decreases in anxiety (Grob et al., 2011) and depression (Carhart-Harris et al.,

2018, 2021) and increases in connectedness (Watts et al., 2017).

This study is the first qualitative investigation, to the authors' knowledge, into why veterans with symptoms of trauma may choose to use psychedelics. The use of qualitative interviews and an IPA approach enabled the veterans to provide in-depth and personal accounts of their experiences. This was important to explore the perspectives of those who may consider psychedelics to be a viable treatment option. Additionally, the lack of research in the area means that qualitative research is beneficial in exploring the topic and identifying focus points for future research.

However, the findings should be considered in the context of their limitations. Firstly, veterans who had positive experiences with psilocybin may have been more likely to volunteer for the study. This may have been influenced by the fact that most participants were contacts of JCN met through networking events where arguably people with positive experiences of psilocybin were possibly more likely to attend. The sample may have therefore excluded individuals who had negative experiences with psilocybin and evidence suggesting that psilocybin may lead to negative outcomes in some people (Bienemann et al., 2020), highlights the importance of further research. Additionally, the study relied on retrospective accounts of participants' symptoms before using psychedelics. This may have resulted in the *present state effect*, whereby participants may have remembered their prior symptomatology as worse, and the speed of the improvements as faster than they were due to their current improved state (Blome and Augustin, 2015).

The barriers in accessing treatment reported by participants stress the importance of treatment options that are perceived as effective and accessible by veterans. For example, the finding that some veterans may not seek treatment due to not wanting to take prescribed medication, implies a need for medication-free alternatives. Other literature suggesting that some veterans struggle with therapy due to not feeling able to talk about their symptoms (Visco, 2009) propose that exclusively having the options of medication or therapy may be insufficient in ensuring that everybody can access treatment. Additionally, psilocybin was considered a viable alternative treatment option for the veterans in this study, therefore it may be considered so by others who feel they would not benefit from current options, or who perceive them as inaccessible.

Ultimately, this study provides an initial insight into the experiences of veterans with symptoms of trauma who have used or have considered using psilocybin. It is important to note that this study does not advocate for individuals self-medicating with psychedelics but instead highlights the vital need for further research in this area. This is consistent with other research suggesting that the healing effects of psilocybin should be explored further to potentially improve outcomes in trauma patients. Larger studies and

clinical trials are required to assess the therapeutic potential of psilocybin for symptoms of trauma and for a range of mental health disorders. Nevertheless, the current study adds to the mounting body of evidence suggesting there is a need to review drug legislation for research and medical purposes (Howard et al., 2021; Nutt et al., 2013).

### Declaration of conflicting interests

JCN is a scientific advisor to Beckley Psytech, Albert Labs and Octarine Bio.

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