Cambridge Quarterly of Healthcare Ethics (2024), 1–15
doi:10.1017/S0963180124000604

CAMBRIDGE UNIVERSITY PRESS

RESEARCH ARTICLE

How to Make Psychedelic-Assisted Therapy Safer

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Abstract

Classic serotonergic psychedelics are experiencing a clinical revival, which has also revived ethical debates about psychedelic-assisted therapy. A particular issue here is how to prepare and protect patients from the vulnerability that the psychedelic state creates. This article first examines how this vulnerability manifests itself, revealing that it results from an impairment of autonomy: psychedelics diminish decision-making capacity, reduce controllability, and limit resistance to external influences. It then analyzes the strengths and weaknesses of five safety measures proposed in the literature, what aspect of the patient's vulnerability they seek to reduce, and how they can be optimized. The analysis shows that while preparatory sessions, advance directives, and specific training and oversight are useful, starting with a lower dosage and no therapy is less so. Finally, the article presents a safety measure that has been overlooked in the literature but could be highly effective and feasible: bringing a close person to the psychedelic session.

Keywords: Psychedelic-assisted therapy; ethics; vulnerability; impaired autonomy; safety measures

Introduction

The resurgence of interest in classic serotonergic psychedelics (i.e., psilocybin, lysergic acid diethylamide (LSD), and N,N-dimethyltryptamine (DMT)—the substances on which this article focuses) and the concomitant rapid developments in clinical psychedelic research have also attracted the attention of bioethicists.[1] In the last few years, vivid ethical debates on therapy assisted by classic serotonergic psychedelics (hereafter referred to as PAT) emerged.[2,3] Such debates are urgently needed because (1) the legal practice of PAT in both research and nonresearch contexts continues to grow (e.g., in 2023, Australia became the first Western country to officially approve psilocybin for treatment); (2) during the first flowering of psychedelic research in the 1950s and 1960s, ethical aspects were often neglected, leading to unethical practices that likely contributed to the controversial status of psychedelics and their subsequent demise;[4] and (3) cult-like communities that illegally practice PAT, such as the *Cherry Blossom Community*, and harmful underground PAT incidents raise public concerns about PAT.[5] Thus, to prevent unethical practices and convince the public of the benefits of psychedelics (if found), it is essential that clinical psychedelic research be accompanied by ethical inquiry.

One ethical aspect of PAT that has received particular attention is the vulnerability to which patients are exposed during treatment. Many authors emphasize that psychedelics put patients in a vulnerable state.[6,7,8] In fact, the degree of vulnerability in PAT is argued to be higher than in other therapeutic treatments, and there are past incidents where patients' vulnerability has been exploited.[9] But while there is general agreement that PAT increases vulnerability, it remains unclear exactly how this vulnerability manifests itself. In addition, while there are some broad ideas for safety measures to protect patients[10,11,12], these ideas have not been properly evaluated.

This is what the present article draws on. First, the article argues that during PAT, psychedelics impair autonomy as they diminish decision-making capacity, lead to an uncontrollable, emotionally intense and turbulent state, and make us more susceptible to external influence. Second, the article discusses five possible safety measures proposed in the literature: (1) preparatory sessions, (2) advance directives, (3) starting with a lower dosage, (4) no therapy, and (5) specific training and oversight. It argues that (1), (2), and (5) are reasonable, while (3) and (4) are not because they leave many questions unanswered. The article also shows how the proposed safety measures can be optimized. Finally, it describes a promising safety measure that has been overlooked in the literature: (6) bringing a close person.

Psychedelic-assisted therapy and vulnerability

The literature on PAT often highlights that psychedelics put patients in a vulnerable state. For example, Tahlia Harrison [13] mentions "the unique risks posed by the forced vulnerability associated with P-AT" (p. 58); Andrew Lee and colleagues [14] note that "the unique and unpredictable psychedelic experience can create situations of intensified vulnerability for some participants" (p. 1); and Neşe Devenot and colleagues [15] write that "the client-therapist(s) relationship in P-AT presents greater vulnerabilities than the typical power imbalance in psychotherapy". Furthermore, in a qualitative exploration of relational ethical challenges in underground PAT, many participants described the pronounced vulnerability of a client under the influence of psychedelics as a risk factor.[16]

The authors cited in the last paragraph agree on what makes the psychedelic state a vulnerable state: psychedelics diminish decision-making capacity and increase suggestibility, both of which impair autonomy. However, they are largely silent on the ways in which decision-making capacity is diminished and suggestibility is increased. So far, the paper by Manuel Trachsel and myself [17] is the closest we have come to an answer. It examines the ethical implications of PAT's therapeutic mechanisms as proposed by the relaxed beliefs under psychedelics (REBUS) hypothesis.[18] In short, the REBUS hypothesis, based on a Bayesian understanding of how the brain works, holds that psychedelics reduce the strength of our "beliefs" (i.e., priors) while increasing the influence of sensory input.[19] During a psychedelic session, patients are therefore assumed to enter a state of revisability, coming with enhanced suggestibility and sensitivity to context.[20,21] On the one hand, this state is hypothesized to enable therapeutic progress because dysfunctional beliefs can be revised and replaced by more functional ones.[22] On the other hand, patients can also be exploited in this state, as they lose control and become more strongly dependent on the therapist and the therapeutic environment in general. For this reason, Manuel Trachsel and I [23] argue that PAT is associated with a high level of patient vulnerability (in fact higher than in other psychiatric treatments) that must be considered ethically.

Let us analyze how exactly PAT's proposed mechanisms of action diminish decision-making capacity and increase suggestibility and whether these are the only ways in which psychedelics impair autonomy. We start with decision-making capacity. Decision-making capacity is usually defined as a set of different abilities.[24] These abilities enable a person to weigh the available options, choose the one that is most consistent with their personal beliefs and values, and carry out that choice.[25] Importantly, decision-making capacity is one of the elements of informed consent.[26] In turn, one (and for many the main) purpose of informed consent is to enable and promote autonomous decision-making.[27] For this reason, decision-making capacity and autonomy are usually considered to be closely related.

Psychedelics affect our decision-making capacity in two ways: First, research on the acute effects of psychedelics on cognition and decision-making shows that they impair memory, cognition, and executive functions.[28,29,30] Because of that, it is prima facie unclear whether a person under the influence of psychedelics still has the abilities needed for being decisionally capacitated. Second, our beliefs change under psychedelic influence, and some of these changes can also be long-lasting.[31,32,33] While these changes in beliefs may, for example, affect negative beliefs associated with depression, resulting in symptom relief, they may also affect beliefs that you hold dear. Therefore, when you make a decision under the influence of psychedelics (and perhaps sometime afterwards), you do so on the basis of (some) beliefs that you do not otherwise hold and may also not wish to hold. This casts doubt on whether a

person under the influence of psychedelics is decisionally capacitated regardless of whether they maintain their cognitive/executive abilities. For example, during a psychedelic session, the primary decision a patient must make is whether to consent to therapeutic touch (e.g., handholding). Now, psychedelics often reinforce the belief that we are not separate from the people and the world around us and induce strong feelings of connectedness to others and to nature.[34] This strongly felt social bond induced by psychedelics could promote a preference for therapeutic touch. Therefore, patients may desire therapeutic touch during a psychedelic session because the psychedelic substance has changed their preferences accordingly; they would not desire therapeutic touch if they were not under the influence of psychedelics.

Next, why does PAT make patients more susceptible to external influence?[35,36] The following hypothesis can be put forward: Under the influence of psychedelics, the way in which we normally filter our sensations and thereby give meaning to them is no longer present. Instead, we filter our sensations in a way that allows for more free flow of sensory input.[37,38] The increased influence of sensory input has the following effect: As we lose our usual filters, we also lose the interpretative and behavioral guidance they give us, reducing our ability to adaptively behave in a goal-directed fashion. This is reflected in the decrease in cognitive control that psychedelics cause.[39,40,41,42] The sensory input, which is gaining influence, (partly) re-establishes this lack of guidance, with suggestions from other people or the person's context in general being part of the sensory input. In other words, psychedelics change our usual filters of how to interpret and respond to sensations, leaving us with less guidance, which to some degree is compensated for by seeking more guidance in the sensory input (including the therapist and the therapeutic setting). In this process, psychedelics may also reduce our ability to protect ourselves from unwanted influences (i.e., external influences one would normally repel), leaving us at the mercy of our sensory input to some extent. In fact, an important piece of advice is to surrender to a psychedelic experience, or to quote a common mantra, to trust, be open, and let go, because fighting back is usually counterproductive.[43] This suggests that it is difficult to repel unwanted influences in a way that improves the overall experience.

As the acute psychedelic experience passes, one gradually regains autonomy. However, autonomy may not be completely regained right after the psychedelic trip. Robin Carhart-Harris and Karl Friston [44] assume that for some time our beliefs remain in a state of facilitated revisability, and thus influenceability. According to them, it is during this period that the actual acquisition and integration of new knowledge occur. In the context of PAT, this is the period where integration sessions take place. So, if Carhart-Harris and Friston are correct, then the therapist is still able to exert a greater influence on the patient during the integration sessions (compared to "normal" psychotherapy sessions).[45]

Finally, the above analysis indicates that psychedelics do not only impair autonomy by diminishing decision-making capacity and increasing suggestibility. The very loss of control that accompanies a psychedelic experience impairs autonomy as well: When you take psychedelics, you can no longer control our experience, which tends to be emotionally intense, turbulent, and challenging, and you are advised not to try it, even if the experience turns into a so-called bad trip. At the same time, you become more receptive to sensory input, losing your usual meaning-making filters and the goal-directed behavior associated with them. Consequently, you temporarily lose the autonomy over our experience, its interpretation, and your reaction to it. This fundamental loss of control makes you vulnerable, regardless of whether there is someone who could exert influence on you or whether you lack decision-making capacity.

To conclude, PAT puts patients into a vulnerable state because psychedelics acutely impair autonomy in three ways: First, psychedelics impair our memory, cognition, and executive functions, and change our beliefs and preferences, casting doubt on whether a person under the influence of psychedelics is still decisionally capacitated. Second, psychedelics put us in an uncontrollable, emotionally intense, and turbulent state where we have partially lost our usual ways of interpreting and responding to sensations. Third, psychedelics increase the tendency to seek guidance from sensory input, making us more susceptible to outside influence and guidance.

Safety measures

Several authors have argued that the enhanced vulnerability during PAT necessitates special safety measures.[46,47,48] These safety measures must address the three sources of patient vulnerability described before. This section will analyze five safety measures that have been proposed in literature: (1) preparatory sessions; (2) advance directives; (3) starting with a lower dosage; (4) no therapy; and (5) specific training and oversight. Preparatory sessions primarily prepare patients for the loss of control; advance directives address impaired decision-making capacity and prevent (some) unintentional overstepping; starting with a lower dosage reduces the loss of control and the increase in suggestibility; and no therapy and specific training and oversight protect patients from (unintentional) exploitation and transgression. Finally, the article presents a new safety measure, (6) bringing a close person, which addresses all three sources of vulnerability. Figure 1 provides a brief summary of the analysis.[49]

Preparatory sessions

The purpose of preparatory sessions is to prepare patients for the psychedelic session by informing them about PAT and by discussing their hopes and fears regarding PAT. At the same time, preparatory sessions should also help patients to get a sense of how comfortable they are with the therapist. This is important because an initial therapeutic bond is seen a prerequisite for psychotherapeutic work to be effective, and the key element of such a bond is trust.[50] To be clear, trust is essential in all medical contexts, but it is particularly important in psychotherapeutic contexts. In the words of Edward Bordin:[51]

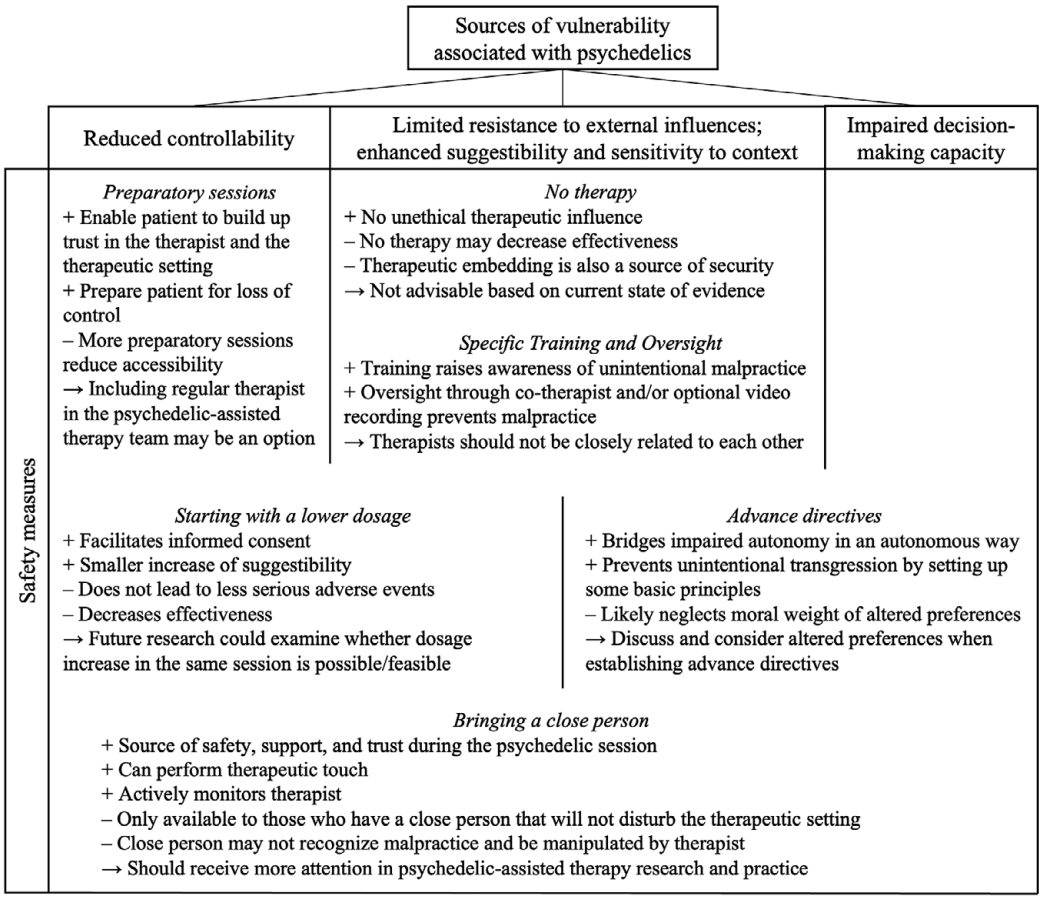

Figure 1. Three sources of vulnerability associated with psychedelics and six safety measures that address them.

"Some basic level of trust surely marks all varieties of therapeutic relationships, but when attention is directed toward the more protected recesses of inner experience, deeper bonds of trust and attachment are required and developed." (p. 254) During PAT, it is certainly the case that attention is directed toward the more protected recesses of inner experience, which makes trust a very important aspect of it.

At the most basic level, there are two components that have an impact on trust in the context of PAT.[52] First, the first encounter with the therapist is crucial as this is where the patient immediately assesses whether the therapist is trustworthy.[53] In this connection, it is important to note that the assessment is based not only on the therapist but also on the therapeutic setting. So, it is crucial that preparatory sessions not only inform patients about PAT but also make them familiar with the setting more generally. Second, the patient's prior attitude toward PAT is critical. For example, trust in psychotherapists is generally higher when psychotherapy is a culturally accepted treatment approach.[54] Since there are still public reservations regarding psychedelics (mainly stemming from the first psychedelic wave of the 1960s), PAT may not always be met with a big credit of trust. It is therefore important to address potential fears and doubts about PAT during preparation sessions. Having the opportunity to building up trust in both the therapist and the treatment should help patients to decide whether they want to expose themselves to the vulnerable state that comes with a psychedelic session.

Preparatory sessions are standard in clinical trials, with their overall duration ranging from two to eight hours.[55] But they come with a tradeoff. On the one hand, patients get a better sense of whether they feel comfortable enough to continue PAT if there are several/longer preparatory sessions (but it should be noted that even with several preparatory sessions, it can be difficult to establish a solid therapeutic relationship in such a short time in which the patient fully trusts the therapist). On the other hand, the more preparatory sessions there are, the higher the cost of PAT, reducing its accessibility; an issue that will become more relevant if PAT becomes an approved treatment.[56]

There are two approaches that can be taken to address this tradeoff. First, the tradeoff may be less pronounced than it appears, as evidence from psychotherapy research shows that more investment in the therapeutic relationship improves therapeutic outcomes.[57] Admittedly, it remains to be tested whether this is also the case in the context of PAT [58] and whether more preparatory sessions contribute to a better therapeutic relationship. But if it is, then the higher cost in terms of more preparatory sessions would not only make PAT safer but also more effective.

Second, one solution to this tradeoff might be to include the patient's "regular" therapist in the PAT team. Usually, there are two therapists present during a psychedelic session.[59] While there should be a PAT expert, the other person could be the patient's regular therapist. This enables a distribution of roles: While the PAT expert is in charge of the whole procedure, the regular therapist gives the patient a feeling of safety and familiarity during the treatment (assuming that the patient already has a solid therapeutic relationship with the therapist). This may allow the number of preparatory sessions to be reduced (or partially outsourced to the regular therapist) while maintaining a high level of trust and safety. Then again, including the patient's regular therapist is a partial solution at best because not all patients have regular therapists, and those who do may not want them there during PAT. Besides, it could be argued that the nondirective nature of PAT should not be compromised by including the patient's regular therapist, who is likely to work in a more directive manner. Future empirical research should examine the optimal role of a patient's regular therapist in PAT.

Advance directives

The idea behind advance directives is that prior to the psychedelic session, patients give consent to what the therapist is allowed to do during the psychedelic session.[60,61] By predetermining their choices when their decision-making capacity is not yet impaired, advance directives enable patients to bridge the potential state of impaired decision-making capacity in an autonomous way. Consequently, the therapist knows what the patient is comfortable with and where they would cross a line, preventing unintentional overstepping.

While it is of course useful to discuss the contingencies of a psychedelic experience and to learn how the patient would like the therapist to respond to them, there are two problems with advance directives. The first one concerns that it is not possible to provide for all contingencies. A psychedelic experience can manifest in many different ways and its hard, if not impossible, to anticipate these manifestations before actually having them. Thus, advance directives must remain incomplete. Nonetheless, a patient can establish some basic principles, such as no therapeutic touch or only therapeutic touch in the form of handholding.

The second problem concerns the preference changes caused by psychedelics (see Section 2). Before taking psychedelics for the first time, you do not know how exactly it will change your preferences and what that will be like. Still, you have to predetermine how you want to be treated when you take psychedelics, with the result that you are likely to neglect your altered preferences. The same problem of advance directives has been discussed in the context of degenerative diseases, with the conclusion that they may carry little moral weight if altered preferences are not considered.[62] To take an example in the context of PAT, what if a patient decides beforehand that they do not want therapeutic touch but then requests it during the psychedelic experience? The precautionary principle would say that until there is a complete scientific understanding of the risks and benefits of therapeutic touch, it should be declined in such a situation.[63,64] This is because the potential risks of unwanted touch outweigh the indeterminate benefits. Then again, the therapist may disregard the patient's current preferences in refusing therapeutic touch, and it is at least prima facie questionable whether these preferences should have no moral weight.

One possible way to address this second problem, at least in part, is as follows: When establishing advance directives, the possibility of altered preferences should be discussed and considered, making the advance directives more nuanced. For example, instead of simply stating that there should be no therapeutic touch, a patient should predefine the application of therapeutic touch more precisely: there should be no therapeutic touch even if requested, or there should be no therapeutic touch unless explicitly requested, and then only handholding.

Starting with lower dosage

The next safety measure to be discussed is to use a lower-than-normal dosage in the first psychedelic session and then continue with a normal dosage in the next session if desired.[65] Taking a lower dosage reduces the effects of psychedelics, which is thought to result in less loss of control and less susceptibility to outside influences than a standard dosage. It allows patients to test how comfortable they feel under the mild influence of psychedelics and, based on that, helps them decide whether they are willing to take the normal dosage next time. In addition to reducing vulnerability, it has been argued that such a two-step procedure has another benefit, namely, facilitating informed consent for PAT (i.e., informed consent for PAT as a whole). There is a lively debate in the literature as to whether informed consent for PAT is possible in general, as patients may not fully understand what they are getting into.[66,67,68,69,70] By taking a lower dosage first, patients learn what a mild psychedelic experience is like, which helps them anticipate a normal dosage psychedelic experience. So, the epistemic gap between having no psychedelic experience and having a normal dosage psychedelic experience is bridged by having a lower dosage psychedelic experience. This decreases the presence of epistemic inaccessibilities during the informed consent process.

While this safety measure seems to directly reduce the vulnerability associated with PAT, it comes with two problems. First, a study with a 10 mg psilocybin condition and a 25 mg psilocybin condition found that the lower dosage resulted in smaller therapeutic effects.[71] Thus, a two-step procedure is less effective, and since it is not less costly, it is also less cost-effective. Second, this study also found that the 10 mg psilocybin condition resulted in a similar number of serious adverse events as the 25 mg psilocybin condition, while there were no serious adverse events in the 1 mg psilocybin condition. This suggests that lower dosages are not per se safer than normal dosages. Admittedly, it is unclear to what extent these serious adverse events are related to patient vulnerability. But it is at least possible that the vulnerability caused by the loss of experiential and cognitive control during the psychedelic experience contributed to

the serious adverse events. If this is true, then a lower dosage would not necessarily reduce vulnerability in this regard. Besides, there are also suggestions from the extra-legal PAT community that lower dosages of psychedelics can make people feel agitated without allowing them to have a breakthrough, leading to a negative experience.[72] Thus, it remains to be empirically tested to what extent a lower dosage actually decreases vulnerability.

A possible modification of this safety measure could be to start the psychedelic session with a lower dosage and then increase the dosage if the patient feels comfortable with it. Doing so maintains the two-step procedure without the need for two sessions, making it more cost-effective. In addition, if patients choose to increase the dosage, they will not experience the negative effects that may be specific to a mild psychedelic experience (i.e., making a person feel agitated without allowing them to have a breakthrough). However, the modified procedure also comes with serious problems: First, due to psychedelics' effects on decision-making capacity, it is unclear whether patients under the influence of a lower dosage of psychedelics are able to make an informed decision about whether to increase the dosage. Second, it is not clear how to time the second dose to achieve appropriate target blood levels and what the appropriate target blood levels would be. Third, the two-step procedure lengthens the psychedelic session, which is already a day-long endeavor in its normal form. Fourth, there is no research on how starting with a lower dosage and then increasing it affects the effectiveness of PAT.

No therapy

Guy Goodwin and colleagues [73] have launched a controversial discussion by questioning that psychedelic must always be assisted by psychotherapy. The authors argue that the psychedelic substance itself, not psychotherapy, is responsible for the effects observed in the best controlled PAT studies to date. Therefore, the inherent combination of psychedelics and psychotherapy in PAT seems to be unfounded. This is not to say that patients should not be provided with psychological support during PAT. However, the goal of the psychological support should be the establishment of safety, not the facilitation of efficacy. Besides the missing evidence showing that the combination of a psychedelic substance and psychotherapy is particularly effective, the authors provide another argument for removing the therapy part: Since the unregulated practice of psychotherapy is a frequent source of ethical violations[74], the harm that can result from therapist-patient interactions during PAT may not be fully appreciated.[75] Therefore, there is nothing to be gained by exaggerating the role psychotherapy plays in helping one to benefit from the psychedelic experience. On the contrary, removing the therapy part of PAT makes it safer, as violations in the context of therapist-patient interactions are no longer possible. Thus, removing the therapy part of PAT can also be seen as safety measure: it reduces vulnerability during integration sessions, where patient suggestibility may still be enhanced[76], by excluding directive therapist-patient interactions.

Many authors have responded to Goodwin et al. and rejected their arguments.[77,78,79,80] First, the responders argue that there is no clear evidence indicating that the psychedelic substance alone is responsible for the therapeutic effects of PAT. Current data do not allow us to disentangle the effects of the psychedelic, the therapy, and their interaction. Second, it is argued that embedding the psychedelic session in a larger psychotherapeutic setting is not a safety risk but a safety measure in itself.[81] Eduardo Schenberg and colleagues [82] even take a study co-conducted by Goodwin as potential evidence for that.[83] In this study, which has a relatively high number of serious adverse events, patients received nondirective psychological support (which is standard in many PAT trials). Schenberg et al. [84]argue that this relatively high number of serious adverse events "might have been mitigated with greater emphasis on relational elements during preparation and integration—rather than simply 'psychological support.'" (p. 76) Whether this is true remains speculative. Goodwin et al. [85]explain the relatively high number of serious adverse events by the fact that the study was conducted in a difficult-to-treat population and that the higher risk of suicidality reflects clinical reality.

Overall, the current evidence is insufficient to suggest that no therapy is helpful as a safety measure. It is true that no therapy may protect the exploitation of the patient's enhanced suggestibility during the integration phase of PAT by excluding directive therapist–patient interactions. However, the absence of

therapy, with only psychological support, also seems to remove an important source of safety for the patient. Ultimately, it could be argued that instances of violations in the context of therapist–patient interactions are not a justification for not providing therapy but rather for specific training and oversight of therapists.[86,87]

Specific training and oversight

This brings us to the next safety measure: specific training and oversight.[88] A major goal of the training (including mandatory supervision) should be to prevent psychedelic therapists from being unintentionally exploitative or transgressive. For example, participants in a qualitative study of relational ethical challenges in extra-legal PAT stated that PAT involves much transference (e.g., "guru projections" where patients attribute great wisdom or power to the therapist) and countertransference (e.g., reinforcement of patients' guru projections).[89] Psychedelic therapists need to be able to discern such (counter)transferences and to adequately respond to them. Unfortunately, there are cases where PAT therapists in extra-legal settings have clearly failed in this regard.[90] In the legal context, it is also conceivable that psychedelic enthusiasts, in particular, might push patients into PAT and/or impose their own insights from psychedelic experiences onto them. Accordingly, it is essential that psychedelic therapists have a high degree of self-knowledge and self-reflection so as not to influence their patients unintentionally. Psychotherapists and psychiatrists should gain such self-knowledge and self-reflection during their years-long training, which makes them optimal candidates for becoming psychedelic therapists. Furthermore, they are also familiar with the therapeutic context in which PAT takes place and the challenges that arise from the interpersonal interactions in this context.

As an aside, the last paragraph points to a problem in the Oregon psilocybin legalization model. Since 2023, psilocybin is legally available in the US state of Oregon. However, the only way to take psilocybin legally is in a supervised session (preceded by a preparatory session) with a facilitator. These facilitators do not need to have a degree in medicine or psychology, nor do they need to have years of training (in full-time, the training to become a psilocybin facilitator can be completed in a few months). This is problematic for the reasons outlined in the last paragraph because even though PAT is not officially acknowledged in Oregon, many people seeking PAT are likely to go to a facilitator instead.

Specific oversight of psychedelic therapists and psychedelic sessions should reduce both intended and unintended wrongdoing. A common form of oversight is the presence of two therapists during a psychedelic session.[91] This discourages intentional malpractice by one therapist and allows therapists to directly abort and report the malpractice of their co-therapist. However, this only works if therapists are not covering for each other and/or do not have the same unethical understanding of how to practice PAT. For example, one patient in an MDMA-assisted therapy trial experienced abuse during MDMA sessions by her two therapists, who were a married couple.[92] So, having two therapists is not always a safeguard (especially if they are not independent of each other).

A less therapist-dependent way of monitoring is to video record therapy sessions, which is a mandatory requirement in many PAT trials.[93] Optimally, the mere presence of a video recording prevents intentional breaches of boundaries. However, it can also be helpful in detecting misconduct. Returning to the abuse case mentioned in the last paragraph, the patient later accused her therapists of serious misconduct. As part of the investigation, all available video recordings were reviewed, showing disturbing footage of clearly abusive behavior: therapists pinning her down, cuddling and kissing her, and physically overpowering her attempts to resist.[94] Finally, in addition to their preventative and educational function, video recordings can also provide safety to the patient by giving them a neutral view of what happened during the psychedelic session. For example, a patient may have had a hallucination that they are sure was real, even though the therapist says otherwise. A video recording can then clarify that the patient's perception was not real.[95] Taken together, video recordings provide a useful safety measure for patients. However, the decision to record psychedelic sessions should be left to the patient, as the presence of a recording can also make the patient feel uncomfortable and may be perceived as an invasion of privacy.[96]

Bringing a close person

One safety measure that has not been discussed in the literature so far is to bring a close person to the psychedelic session (and for preparation to one of the preparatory sessions). This reduces the patient's vulnerability in regard to all three sources. First, ideally, the presence of a close person with whom one has a strong relationship is a source of security, support, confidence, and positivity. Having such a person around during the psychedelic experience should therefore have a positive influence on the therapeutic setting and thereby the psychedelic experience itself. While the patient will still experience a loss of control, this fact likely becomes less frightening because they know that there will be someone around them who deeply cares about them. At this, it is interesting to note that in PAT trials, a close person already plays a supportive role *after* the psychedelic session: it is common that patients must designate a support person to pick them up after the session.[97] So, having a close person to support the patient also during the psychedelic session can be seen as a kind of extension of this practice.

Second, while the method of therapeutic touch adopted from PAT practices in the 1960s has long been considered best practice in modern PAT studies, this has been challenged in recent years. Denevot et al. [98] emphasize that there is too little research on the topic to justify it on scientific grounds, taking into account that therapeutic touch can be (unintentionally) transgressive. This is where the close person can step in: instead of the therapist comforting a distressed patient with touch, the close person does it. It can be assumed that the likelihood of this being transgressive is minimal, especially when the patient has given the close person permission in advance to touch and comfort them during the session.

Third, the close person monitors the therapist, thereby discouraging intentional malpractice and helping to detect unintentional malpractice. A major advantage of this type of monitoring over recording the session is that it is active, not passive: instances of malpractice can go unnoticed if the patient is unaware that they are being treated incorrectly and no one is watching the recordings.

While bringing a close person to the psychedelic session has not been discussed in the literature so far, it has been recommended by Meaghan Buisson in a podcast.[99] Meaghan Buisson is the person mentioned in the last section who experienced severe abuse in a MDMA-assisted therapy trial. In the podcast, she says: "The advice that I always give people is the only way to be safe in a psychedelic space is if you bring someone with you, someone who is not tied to whoever your guide or shaman is. Someone who is sober and not taking anything and whose sole purpose in that space is to watch your back." Ultimately, having a close person around during a psychedelic trip (so-called psychedelic carers or trip sitters) is also common in the "recreational" use of psychedelics. A study of two online forums on psychedelics examined the preferred qualities of psychedelic carers.[100] It found that forum members often suggested that a friend or the romantic partner may be an appropriate choice for the role of the psychedelic carer. In addition, forum members regularly advised against having a psychedelic carer with whom one does not have a pre-existing relationship.

This safety measure also comes with limitations/challenges: First and foremost, it is only available to those who have a person they are close with and/or trust, and who want to bring that person to the psychedelic session. Therefore, bringing a close person cannot be a requirement for PAT, as this would exclude many patients from treatment, but only an option available to patients.

Second, the person a patient brings to the psychedelic session must be well-chosen. For example, it may be counterproductive to bring a person with whom the patient has unexpressed relationship conflicts, as their presence may amplify these conflicts during the psychedelic experience. Or it may be problematic if the person is skeptical about PAT, bringing a negative vibe to the setting. However, these are not reasons against bringing a close person per se, but rather to choose the person carefully, perhaps in consultation with the therapist, and to refrain from bringing a close person if none is appropriate.

Third, it could be argued that the mere presence of a close person risks changing the nature of the therapy from an individual therapy to a kind of family therapy, which may be neither intended nor desired from a therapeutic point of view. However, while the presence of a close person certainly affects the setting (which is why they are there), the comparison to family therapy seems misleading. Verbal interactions during a psychedelic session are relatively rare, as patients are usually lying on a bed,

blindfolded, and listening to music in order to fully immerse themselves in the experience. This focus on the patient's own experience without a need to communicate their thoughts and feelings should keep the nature of the therapy an individual one even if a close person is present.[101]

Fourth, the close person must give informed consent to be present during the psychedelic session. For example, they need to be informed that the patient may be reliving a trauma, or even recognizing a trauma of which they were unaware, and that they may be behaving in ways or saying things that are disturbing (of course, the patient needs to be informed of all of this as well). In this context, it seems reasonable that after receiving the consent form, the close person should attend one of the preparatory sessions where they are given the opportunity to clarify their own questions.[102]

Fifth, it is possible that during the psychedelic experience the patient wants the close person to leave. If this is the case, the close person must respect the patient's request and leave the session. However, they should stay close by in case the patient wants the close person to return. Ideally, the patient, the close person, and the therapist discuss how to handle such a situation in a preparatory session.

Sixth, as the close person may not always be aware of which practices are malpractices, they may not recognize malpractice when they are monitoring the therapist. It is therefore important that there is easily accessible and understandable information (e.g., a website) about ethical PAT practices coming from a trusted institution (e.g., the American Psychiatric Association or the American Psychological Association).[103] Furthermore, it is possible that the therapist tries to manipulate the close person. While this cannot be completely avoided, manipulation attempts are likely to be less successful if the close person and the therapist are independent of each other (e.g., the close person is not also a patient of the therapist).

Finally, regarding economic efficiency: On the one hand, bringing a close person may increase the cost of preparatory sessions, as they no longer prepare only the patient, but also the close person. On the other hand, it can also reduce the cost of preparatory sessions since the presence of a close person during the psychedelic session reduces the number of preparatory sessions needed to create a safe and trusting setting. Ultimately, as the close person monitors the therapist, they may substitute the second therapist, which would reduce the cost of PAT substantially.

Taken together, despite these limitations and challenges, bringing a close person seems to be an effective and likely also economic safety measure. Therefore, the current role of a close person as a support person *only after* the psychedelic session should be reconsidered, as it appears to waste a lot of potential.

Conclusion

The present paper shows that psychedelics impair autonomy in three ways: they reduce our decision-making capacity, place us in an uncontrollable state of high uncertainty, and make us more susceptible to outside influence and guidance. The five safety measures proposed in the literature and discussed in this paper are only partially able to prepare patients for and protect them from the vulnerability caused by the impairment of autonomy during PAT. Ultimately, a promising safety measure—bringing a close person to the psychedelic session—has not yet been considered in the literature and is not standard in PAT trials. It is therefore crucial that this safety measure receives more attention in PAT research and practice.

On a final note, while some of these safety measures remain optional (e.g., videotaping the session or bringing a close person), the mere existence of the options strengthens patient autonomy. This is because it is up to the patient to decide whether and in what form they want these safety measures. Additionally, the mere existence of these options may also contribute to a stronger sense of safety during treatment as patients realize that their safety is a top priority. Therefore, even if not selected by the patient, optional safety measures can still make PAT safer.

Funding statement. Swiss National Science Foundation (grant number 222239).

Competing interest. The author reports no conflict of interest.

Notes

1. 3,4-methylenedioxymethamphetamine (MDMA) and ketamine are also sometimes classified as psychedelics, and there is also a large body of research on therapy using one of these substances, including phase 3 trials. Loo C, Glozier N, Barton D, Baune BT, Mills NT, Fitzgerald P, Glue P, et al. Efficacy and safety of a 4-week course of repeated subcutaneous ketamine injections for treatment-resistant depression (KADS study): Randomised double-blind active-controlled trial. *The British Journal of Psychiatry* 2023;**223**(6):533–41; Mitchell JM, Ot'alora G. M, van der Kolk B, Shannon S, Bogenschutz M, Gelfand Y, et al. MDMA-assisted therapy for moderate to severe PTSD: A randomized, placebo-controlled phase 3 trial. *Nature Medicine* 2023;**29**(10):2473–80. However, these substances and their associated therapies will not be discussed in this paper, which focuses on classic serotonergic psychedelics (i.e., psilocybin, LSD, and DMT) and the therapies assisted by these substances.
2. For an overview, see Barber GS, Dike CC. Ethical and practical considerations for the use of psychedelics in psychiatry. *Psychiatric Services* 2023;**74**(8):838–46.
3. For an overview, see Kochevar C. Clarifying the ethical landscape of psychedelic-assisted psychotherapy. *Philosophical Psychology* 2024:1–22.
4. Cf. Hartogsohn I. *American Trip*: *Set, Setting, and the Psychedelic Experience in the Twentieth Century*. The MIT Press: Cambridge, Massachusetts; 2020.
5. Brummerloh D. Psycholyse – Therapie oder Trip auf Krankenschein? 2021. available at https://www.swr.de/swr2/wissen/psycholyse-therapie-oder-trip-auf-krankenschein-102.html (last accessed 25 Sep 2024).
6. Brennan W, Jackson MA, MacLean K, Ponterotto JG, A qualitative exploration of relational ethical challenges and practices in psychedelic healing. *Journal of Humanistic Psychology* 2021;1–31
7. Lee A, Rosenbaum D, Buchman DZ. Informed consent to psychedelic-assisted psychotherapy: Ethical considerations. *The Canadian Journal of Psychiatry* 2024;**69**(5):309–13.
8. McNamee S, Devenot N, Buisson M. Studying Harms is key to improving psychedelic-assisted therapy—Participants call for changes to research landscape, *JAMA Psychiatry* 2023;**80**(5):411–412.
9. Villiger D, Trachsel M. With great power comes great vulnerability: An ethical analysis of psychedelics' therapeutic mechanisms proposed by the REBUS hypothesis. *Journal of Medical Ethics* 2023;**49**(12):826–32.
10. Goodwin GM, Malievskaia E, Fonzo GA, Nemeroff CB. Must psilocybin always 'assist psychotherapy'? *American Journal of Psychiatry* 2023;**181**(1):20–5.
11. See note 7, Lee et al. 2024.
12. See note 9, Villiger, Trachsel 2023.
13. Harrison TR. Altered stakes: Identifying gaps in the informed consent process for psychedelic-assisted therapy trials. *Journal of Psychedelic Studies* 2023;**7**(1 Suppl):48–60.
14. See note, 7, Lee et al. 2024.
15. Devenot N, Tumilty E, Buisson M, McNamee S, Nickles D, Ross LK. A precautionary approach to touch in psychedelic-assisted therapy - Bill of health, 2022; available at https://blog.petrieflom.law.harvard.edu/2022/03/09/precautionary-approach-touch-in-psychedelic-assisted-therapy/ (last accessed 9 Feb 2024).
16. See note 6, Brennan et al. 2021.
17. See note 9, Villiger, Trachsel 2023.
18. Cf. Carhart-Harris RL, Friston KJ. REBUS and the anarchic brain: Toward a unified model of the brain action of psychedelics. *Pharmacological Reviews* 2019;**71**(3):316–44.
19. The REBUS framework uses the term "belief" more broadly in the sense of priors, referring not only to the beliefs we consciously hold, but also, for example, to the unconscious beliefs that underlie our perception. This paper uses the term in the same manner.
20. Carhart-Harris RL, Kaelen M, Whalley MG, Bolstridge M, Feilding A, Nutt DJ. LSD enhances suggestibility in healthy volunteers. *Psychopharmacology* 2015;**232**(4):785–94.

21. Carhart-Harris RL, Roseman L, Haijen E, Erritzoe D, Watts R, Branchi I, et al. Psychedelics and the essential importance of context. *Journal of* Psychopharmacology 2018;**32**(7):725–31.
22. Cf. Villiger D. How psychedelic-assisted treatment works in the Bayesian brain. *Frontiers in Psychiatry* 2022;**13**:812180.
23. See note 9, Villiger, Trachsel 2023.
24. Ach JS. Consent and medical treatment. In: A. Müller, P. Schaber, eds. *The Routledge Handbook of the Ethics of Consent*. New York, NY: Routledge; 2018:285–96.
25. Cf. Hawkins J, Charland LC. Decision-making capacity. In: E. N. Zalta, ed. *The Stanford Encyclopedia of Philosophy*. Stanford, CA: Metaphysics Research Lab, Stanford University; 2020.
26. Beauchamp TL. Autonomy and consent. In: F. G. Miller, A. Wertheimer, eds. *The Ethics of Consent: Theory and Practice*. Oxford: Oxford University Press; 2010:55–78.
27. See note 24, Ach 2018.
28. Barrett FS, Carbonaro TM, Hurwitz E, Johnson MW, Griffiths RR. Double-blind comparison of the two hallucinogens psilocybin and dextromethorphan: Effects on cognition. *Psychopharmacology* 2018;**235**(10):2915–27.
29. Healy CJ. The acute effects of classic psychedelics on memory in humans. *Psychopharmacology* 2021;**238**(3):639–53.
30. Pokorny T, Duerler P, Seifritz E, Vollenweider FX, Preller KH. LSD acutely impairs working memory, executive functions, and cognitive flexibility, but not risk-based decision-making, *Psychological Medicine* 2020;**50**(13):2255–64.
31. McGovern HT, Leptourgos P, Hutchinson BT, Corlett PR. Do psychedelics change beliefs? *Psychopharmacology* 2022;**239**(6):1809–21.
32. Timmermann C, Kettner H, Letheby C, Roseman L, Rosas FE, Carhart-Harris RL. Psychedelics alter metaphysical beliefs. *Scientific Reports* 2021;**11**(1):22166.
33. van Elk M, Yaden DB. Pharmacological, neural, and psychological mechanisms underlying psychedelics: A critical review. *Neuroscience & Biobehavioral Reviews* 2022;**140**:104793.
34. Carhart-Harris RL, Erritzoe D, Haijen E, Kaelen M, Watts R. Psychedelics and connectedness. *Psychopharmacology* 2018;**235**(2):547–50.
35. See note, 20, Carhart-Harris et al. 2015.
36. See note, 21, Carhart-Harris et al. 2018.
37. See note, 18, Carhart-Harris, Friston 2019.
38. Preller KH, Razi A, Zeidman P, Stämpfli P, Friston KJ, Vollenweider FX. Effective connectivity changes in LSD-induced altered states of consciousness in humans. *Proceedings of the National Academy of Sciences* 2019;**116**(7):2743–48.
39. Barrett FS, Krimmel SR, Griffiths RR, Seminowicz DA, Mathur BN. Psilocybin acutely alters the functional connectivity of the claustrum with brain networks that support perception, memory, and attention. *NeuroImage* 2020;**218**:116980.
40. Doss MK, Madden MB, Gaddis A, Nebel MB, Griffiths RR, Mathur BN, Barrett FS. Models of psychedelic drug action: modulation of cortical–subcortical circuits. *Brain* 2022;**145**(2):441–56.
41. See note 33, van Elk, Yaden 2022.
42. Note that the three models of neurocognitive mechanisms of psychedelics referred to in this paragraph, namely the REBUS hypothesis (see note 18, Carhart-Harris, Friston 2019), the cortico-striato-thalamo-cortical (CSTC) theory (see note, 38, Preller et al, 2019), and the claustro-cortical circuit (CCC) model (see note 40, Doss et al. 2022) are not necessarily mutually exclusive but can be combined to some extent (see note 40, Doss et al. 2022 and note 33, van Elk, Yaden 2022).
43. See note 9, Villiger, Trachsel 2023.
44. See note 18, Carhart-Harris, Friston 2019
45. Cf. note 9, Villiger, Trachsel 2023.
46. See note 7, Lee et l. 2024.
47. See note 8, McNamee et al. 2023.
48. See note 9, Villiger, Trachsel 2023.

49. Another type of safety measure not mentioned in this paper that is in place before PAT even begins is patient screening. So far, PAT studies have used restrictive inclusion criteria, such as excluding patients with psychotic disorders or a positive family history of such conditions entirely. Furthermore, in two of the three existing Phase 2 trials, only 6–7% of screened individuals were enrolled in the final trial (Carhart-Harris RL, Giribaldi B, Watts R, Baker-Jones M, Murphy-Beiner A, Murphy R, et al. Trial of psilocybin versus escitalopram for depression. *New England Journal of Medicine* 2021;**384**(15):1402–11; Raison CL, Sanacora G, Woolley J, Heinzerling K, Dunlop BW, Brown RT, et al. Single-dose psilocybin treatment for major depressive disorder: A randomized clinical trial. *JAMA* 2023;**330**(9):843–53). While restrictive inclusion criteria can protect patients who are thought to be at higher risk for adverse events during PAT from harm, they also exclude them from the potential benefits of PAT. This is of some concern because for many of the excluded groups, there is little empirical data on whether they are actually at increased risk of adverse events during PAT (and of course no data is collected due to the exclusion criteria). Thus, future research should cautiously attempt to include patient groups in PAT trials that have been excluded based on empirically untested safety concerns. In this way, we can learn which patient groups are truly at risk and protect them accordingly.
50. Wampold BE, Imel ZE. *The Great Psychotherapy Debate: The Evidence for What Makes Psychotherapy Work*. 2nd ed. Routledge: New York; 2015.
51. Bordin ES. The generalizability of the psychoanalytic concept of the working alliance, Psychotherapy: *Theory, research & practice* 1979;**16**(3):252–60.
52. Cf. note 50, Wampold, Imel 2015.
53. Willis J, Todorov A. First impressions: Making up your mind after a 100-ms exposure to a face. *Psychological Science* 2006;**17**(7):592–98.
54. Wampold BE, Psychotherapy: The humanistic (and effective) treatment. *American Psychologist* 2007;**62**(8):857–73.
55. See note 10, Goodwin et al. 2023.
56. Cf. Smith WR, Appelbaum PS. Novel ethical and policy issues in psychiatric uses of psychedelic substances. *Neuropharmacology* 2022;**216**:109165.
57. Cf. note 50, Wampold, Imel 2015.
58. For preliminary evidence, see Levin AW, Lancelotta R, Sepeda ND, Gukasyan N, Nayak S, Wagener TL, et al. The therapeutic alliance between study participants and intervention facilitators is associated with acute effects and clinical outcomes in a psilocybin-assisted therapy trial for major depressive disorder. *PloS one* 2024;**19**(3):e0300501.
59. Cf. note 10, Goodwin et al. 2023.
60. See note 7, Lee et al. 2024.
61. What this paper calls "advance directives" in reference to Lee and colleagues (see note 7, Lee et al. 2024) may also be a part of the enhanced consent concept for PAT proposed by William Smith and Dominic Sisti (Smith WR, Sisti D. Ethics and ego dissolution: The case of psilocybin. *Journal of Medical Ethics* 2021;**47**(12):807–14). In the end, this paper is agnostic about which of the two terms (advance directives versus enhanced consent) is more appropriate for this safety measure.
62. Walsh E. Cognitive transformation, dementia, and the moral weight of advance directives. *The American Journal of Bioethics* 2020;**20**(8):54–64.
63. See note 7, Lee et al. 2024.
64. See note 15, Devenot et al. 2022.
65. Cf. note 9, Villiger, Trachsel 2023.
66. Jacobs E. Transformative experience and informed consent to psychedelic-assisted psychotherapy. *Frontiers in Psychology* 2023;**14**:1108333.
67. Kious BM, Peterson A, McGuire AL. Are psychedelic experiences transformative? Can we consent to them? *Perspectives in Biology and Medicine* 2024;**67**(1):143–54.
68. Villiger D. Informed consent under ignorance. *The American Journal of Bioethics* 2024;1–13.
69. Villiger D. Giving consent to the ineffable. *Neuroethics* 2024;**17**(1):11.

70. So, this debate is not about whether patients can give informed consent to, say, therapeutic touch while under the influence of psychedelics, but whether they can give informed consent to PAT as a whole (while not under the influence of psychedelics).
71. Goodwin GM, Aaronson ST, Alvarez O, Arden PC, Baker A, Bennett JC, et al. Single-dose psilocybin for a treatment-resistant episode of major depression. *New England Journal of Medicine* 2022;**387**(18):1637–48.
72. Aday JS, Heifets BD, Pratscher SD, Bradley E, Rosen R, Woolley JD. Great expectations: Recommendations for improving the methodological rigor of psychedelic clinical trials. *Psychopharmacology* 2022;**239**(6):1989–2010.
73. See note 10, Goodwin et al. 2023.
74. Nutt DJ, Sharpe M. Uncritical positive regard? Issues in the efficacy and safety of psychotherapy. *Journal of Psychopharmacology* 2008;**22**(1):3–6.
75. See note 8, McNamee et al. 2023.
76. See note 18, Carhart-Harris, Friston 2019
77. Deckel GM, Lepow LA, Guss J. 'Psychedelic assisted therapy' must not be retired. *American Journal of Psychiatry* 2024;**181**(1):77–78.
78. Gründer G, Brand M, Mertens LJ, Jungaberle H, Kärtner L, Scharf DJ, et al. Treatment with psychedelics is psychotherapy: Beyond reductionism. *The Lancet Psychiatry* 2023;**11**(3):231–36.
79. Schenberg EE, King F, da Fonseca JE, Roseman L. Is poorly assisted psilocybin treatment an increasing risk? *American Journal of Psychiatry* 2024;**181**(1):75–76.
80. Alpert MD, O'Donnell KC, Paleos CA, Sola E, Stauffer CS, Wagner AC, et al. Psychotherapy in psychedelic treatment: Safe, evidence-based, and necessary. *American Journal of Psychiatry* 2024;**181**(1):76–77.
81. See note 78, Gründer et al. 2023.
82. See note 79, Schenberg et al. 2024.
83. See note 71, Goodwin et al. 2022.
84. See note 79, Schenberg et al. 2024.
85. Goodwin GM, Malievskaia E, Fonzo GA, Nemeroff CB. Psychological support for psilocybin treatment: Reply to letters on our commentary. *American Journal of Psychiatry* 2024;**181**(1):79–81.
86. See note 80, Alpert et al. 2024.
87. See note 79, Schenberg et al. 2024.
88. Cf. note 9, Villiger, Trachsel 2023.
89. See note 6, Brennan et al. 2021.
90. Cf. note 5, Brummerloh 2021.
91. Cf. note 10, Goodwin et al. 2023.
92. Rosin H. *You Won't Feel High After Watching This Video, 2022*; available at https://www.thecut.com/2022/03/you-wont-feel-high-after-watching-this-video.html (last accessed 17 Feb 2024).
93. Rajwani K. The 'Third' eye: Ethics of video recording in the context of psychedelic-assisted therapy. *Canadian Journal of Bioethics* 2023;**6**(3–4):8–15.
94. See note 8, McNamee et al. 2023.
95. Of course, this is only successful if the patient acknowledges that the video is really neutral and not manipulated.
96. Cf. note 93, Rajwani 2023.
97. See note 13, Harrison 2023.
98. See note 15, Devenot et al. 2022.
99. Ross LK, Nickles D (Directors). (2022). *The Complainer's Group - Cover Story: Power Trip, 2022.* available at; https://www.thecut.com/2022/03/cover-story-ep-9-the-complainers-group.html (last accessed 25 Sep 2024).
100. Thal S, Engel LB, Bright SJ. Presence, trust, and empathy: Preferred characteristics of psychedelic carers. *Journal of Humanistic Psychology* 2022;1–24.
101. This is most likely different in MDMA-assisted therapy. But as emphasized in the introduction, this paper only consider PAT with classic serotonergic psychedelics.

102. Note that in current PAT practice, where a close person supports the patient after the psychedelic session, they usually do not get prepared for this potentially very challenging role. While this practice cannot be discussed in detail here, it does not appear to be entirely unproblematic from an ethical perspective.

103. Of course, such easily accessible and understandable information about ethical PAT practices coming from a trusted institution is also of great value to PAT patients.

Cite this article: Villiger D (2024). How to Make Psychedelic-Assisted Therapy Safer. *Cambridge Quarterly of Healthcare Ethics*: 1–15, doi:10.1017/S0963180124000604