Changes in attachment and emotional regulation skills after a psilocybin retreat, and how psychedelics may affect therapists working with ISTDP.

An exploratory, mixed-methods, naturalistic study of legal psychedelic retreat attendees.

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CHANGES IN ATTACHMENT AND EMOTIONAL REGULATION SKILLS AFTER A PSilocybin RETREAT, AND HOW PSYCHEDELICS MAY AFFECT THERAPISTS WORKING WITH ISTDP.

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Psychotherapy outcome research has shown that therapists vary broadly in the clinical results they produce. Part of this effect may be explained by individual variance in certain skills, abilities, and traits – such as emotional regulation skills and quality of adult attachment. Recent clinical research on the effects of psilocybin has shown evidence for rapid and large effects on personality, emotional functioning, and quality of life. Hence, the use of psilocybin in safe, controlled conditions might lead to changes in traits responsible for therapist effects. 50 psilocybin retreat attendees volunteered to participate in a longitudinal self-report survey to investigate effects on emotional regulation skills and self-rated attachment quality measured before the retreat and at two-weeks follow-up. Moderate-to-strong increases in emotional regulation skills were observed together with small-to-moderate decreases in attachment-related anxiety and avoidance. To explore how psilocybin may affect therapists from their own point of view, experiences of seven intensive short-term dynamic psychotherapy practitioners during and after a psilocybin retreat were gathered as brief essays that were thematically analysed. Their experiences provide some insight in how the potentially therapeutic effects of psilocybin are viewed through the eyes of therapists working in another modality, as well as how their own work could be affected in practice.

Psychotherapy is one of the most commonly prescribed interventions for treating mental disorders along with psychiatric medications. However, the effectiveness of psychotherapy has been contested in recent reviews, with effect sizes varying from small (e.g., Leichsenring et al., 2022) to large (e.g., Munder et al., 2018). Individual patient response to psychotherapy also varies widely and is at least to some extent attributable to variability in personal characteristics of therapists, so-called therapist effects (Wampold & Brown, 2005). These therapist effects are also not explained by the length of work experience or the therapeutic orientation of the therapist (e.g., Okiishi et al., 2003). These findings indicate that effective therapist skills may not automatically be gained through experience. Some factors that may influence part of therapist effects include emotional recognition skills (Abargil & Tishby, 2021) and interpersonal skills (Schöttke et al., 2016). Attachment theory is one of the best supported theoretical frameworks for understanding human relationships and has been used to investigate how individual differences in relational patterns affect psychotherapy (Slade, 2016). While attachment-related security has a relationship to emotional and relational functioning (Mikulincer et al., 2003), the evidence for a direct influence of therapist’s attachment on therapeutic outcomes is inconclusive and not well studied. However, therapist attachment style has been found to influence their ability to establish a working alliance (Mikulincer et al. 2013; & Talia et al., 2018), indicating that more secure attachment might improve important processes within therapy. Recent developments in psychotherapy such as the deliberate practice movement has sought to alleviate the issues of therapist effects through the training of specific therapeutic interventions that have been proven to positively affect outcomes (Rousmaniere et al., 2017). Psychotherapists (and their patients) may therefore have much to gain from a greater emphasis on finding effective ways of improving their average treatment outcomes, part of which may be accomplished through developing personal characteristics that are conducive to the therapeutic process.
In the last decade, there has been a growing base of research on serotonergic psychedelic substances like psilocybin, a naturally occurring alkaloid in mushrooms of the genus *Psilocybe*, taken together with psychological support or psychotherapy for the treatment of psychiatric disorders (Nutt et al., 2020). Data from several small clinical trials conducted in the last few years indicate that these methods may be used to treat psychiatric conditions such as treatment-resistant depression, anxiety, substance dependence, obsessive compulsive disorder, (Thomas et al., 2017) and trauma-related illness (Bird et al., 2021). In addition to growing evidence for the potential of psychedelic-assisted therapy to occasion symptom relief, clinical process research and experimental studies have demonstrated rapid and lasting changes in a variety of traits and abilities. Studies measuring changes in big 5 personality traits have shown enduring increases in extraversion and openness as well as reductions in neuroticism (Erritzoe et al., 2018; MacLean et al., 2011). One small uncontrolled pilot study of psilocybin-assisted psychotherapy for demoralization in long-term AIDS-survivors measured changes in attachment orientation and found post-treatment reductions in attachment-related anxiety (Stauffer et al., 2020). In the same study, attachment-related avoidance was found to predict the rate of challenging psychedelic experiences while attachment-related anxiety predicted more mystical-type experiences. While the article by Stauffer and colleagues (2020) so far represents the only example of a study investigating changes in attachment due to psychedelic-assisted psychotherapy, a recent theoretical paper by Cherniak and colleagues (2022) argues for the utility of applying attachment theory as a theoretical framework for studying and predicting responses to psychedelics. This perspective is informed by previous research on the relationship between attachment-orientation, religious beliefs, and spontaneous mystical experiences – altered states of consciousness that are also regularly elicited by high-doses of psilocybin (Griffiths et al., 2006). Emotional breakthrough, another measure of the subjective psychedelic experience, has also been used in recent studies to predict positive outcomes of psychedelic assisted psychotherapy (Roseman et al., 2019).

Therapists practicing intensive short-term dynamic psychotherapy (ISTDP) and other related modalities (experiential dynamic therapies, EDTs) might be of particular interest to study in the context of the impact of psychedelic use on psychotherapists. These therapeutic modalities put great emphasis on assessing the patient’s affective state through non-verbal bodily cues, as well as employing specific techniques for building a strong therapeutic alliance and facilitating emotional experience in the patient (Abbass & Town, 2013). ISTDP is based on psychoanalytic theory, and as such the therapist’s own intrapsychic conflicts and relational history is seen as important factors that impacts their therapeutic work through countertransference processes (Cartwright, 2020). While there is little research on the impact of therapist attachment style on countertransference processes there are theoretical overlaps given that attachment theory postulates internal relational working models regulating representations and behaviors in relationships (Slade, 2016). Thus, an increased capability to process affective cues and form a more secure attachment with the client might be of relevance to ISTDP practitioners.

Given the recent developments in psychedelic science, the use of psilocybin in safe, supervised conditions could potentially promote certain traits that may in turn influence therapist effects for the better. In this essay, I will investigate how psilocybin administered in a psychologically supportive environment might impact traits related to therapist effects as well as how this experience is perceived by therapists. This will be approached from two different methodological angles, one quantitative and one qualitative. In study one, I will investigate longitudinal changes in self-reported adult attachment orientation and emotional regulation skills among psilocybin retreat attendees measured before, during, and two weeks after a retreat. In study two, the psilocybin retreat experiences of therapists practicing intensive short-term dynamic psychotherapy (ISTDP) will be thematically analysed through a structured reading of short anonymous essays written by the participants.

**Psychedelics as a catalyst for psychological change**

To account for the processes underlying the potentially therapeutic effects of psychedelics, several studies have investigated alterations to certain neuropsychological processes and psychological traits due to psychedelic administration. Psilocybin has repeatedly been shown to induce increases in emotional task performance such as facial affect recognition in the days and weeks following the dosing session, accompanied with altered functional connectivity in brain networks and areas associated with emotional processing (Kometer et al., 2012; Stroud et al., 2017; Grimm et al., 2018; & Roseman et al.,
2018a; Barrett et al., 2020). These findings indicate that psilocybin induces a bias and orientation towards positive emotion accompanied with alterations in amygdala activity, contrary to the negative affective bias and impaired facial affect recognition associated with depression (e.g., Joormann & Gotlib, 2006). Psilocybin has also been shown to cause long-term alterations in personality traits such as increased extraversion and openness, as well as reduced neuroticism (Erritzoe et al., 2018; MacLean et al., 2011). Given these findings, I will briefly go over some proposed mechanisms of action that can account for the acute and long-term effects of psychedelics.

Psychedelics have a high affinity for the serotonin 2A receptor, the action of which has shown to result in the release of BDNF that in turn leads to greater expression of dendritic complexity up to one month after dosing (de Vos et al., 2021). FMRI studies have shown that the acute effects of psilocybin lead to temporarily increased entropy and global connectivity – a process linked to associative thinking and novel learning (Carhart-Harris et al., 2014). According to these views, the neuroplasticity-promoting properties of psychedelics are particularly conducive to changes in behaviors, attitudes, emotions, and traits, either from psychotherapy or from other environmental factors during and immediately following a psychedelic experience. The REBUS-model (relaxed beliefs under psychedelics) proposed by Carhart-Harris and Friston (2019), aims to further develop this perspective from the viewpoint of predictive coding. In their view, temporary increases in global connectivity together with reduced functional connectivity in predictive brain networks like the default mode network might lead to more flexible psychological priors that inform prediction. Together with increased neuroplasticity, this process promotes new learning and restructuring of the brain’s prediction models, that in turn can have implications for processes involved in mental health and functioning.

Recurring findings have shown how specific phenomenological features of the psychedelic experience have a moderating effect on outcomes – an effect that is separate from dose or perceived intensity of effects (Griffiths et al., 2006). One recent review investigated the role of so-called mystical experiences as a mediator or predictor for clinical outcomes, and showed a general effect on antidepressant, anxiolytic and substance-use related outcomes (Ko et al., 2022). Mystical experiences, as measured by self-report measures like the Mystical Experience Questionnaire (Pahnke & Richards, 1966; & Barrett et al., 2015), are influenced by the work of William James on the psychology of religion (James, 1917). Within this tradition, mystical experiences are categorized as states featuring experiences of reverence, positive mood & ecstasy, self-transcendence and feelings of unity with God, nature or the universe. A recently developed measure, the emotional breakthrough inventory (Roseman et al., 2019), also seems to separately affect outcomes even though it is somewhat correlated to mystical experience. Perhaps the lasting effects of these intense subjective experiences might also be attenuated by relaxed psychological priors that increase receptivity to new learning.

Within the practice of psychedelic-assisted psychotherapy, many practitioners put emphasis on a process known as the “inner healing intelligence” that can be accessed during a psychedelic session. This process is seen as a guiding force or “inner therapist” that leads the patient to whatever psychological material that needs addressing in their life. While the inner healing intelligence is a poorly defined concept that has not received much attention by researchers, it is included as an important rationale for the therapist’s supportive and unintervening approach in MAPS’ MDMA therapy manual for PTSD (Mithoefer, 2017), a model that has increasing empirical support including one large scale phase 3 clinical trial (Mitchell et al., 2021). This approach postulates that the patient’s inner healing intelligence has better access to what relevant traumas need addressing than the therapist, and the therapist’s role is to promote the expression of this process while refraining from interventions that may disturb it. This therapeutic approach is very different from conventional psychotherapeutic modalities for treating trauma such as prolonged exposure, that are highly structured and directed by the therapist to re-imagine and reprocess the trauma (Foa et al., 2019). The concept of inner healing intelligence requires more empirical attention given that it implies a treatment rationale distinct from other trauma therapies, while still resulting in potentially good outcomes.

**Psychedelics and attachment theory**

Attachment theory is one of psychology’s most extensively researched frameworks for understanding the development of how humans perceive, construct, and act in relationships. Attachment theory posits that relational experiences, particularly experiences of seeking safety and care with
caregivers early in life, shape “internal working models” that help predict the actions and attitudes of others (Bowlby, 1982). These internal working models help with organizing relational behaviors and affect the perception of the self in relation to others. Attachment theory predicts that individual variations of the quality of these relational experiences in turn lead to qualitatively different internal working models that over time solidify into relatively stable attachment orientations. These can be conceptualized along two dimensions – attachment anxiety and attachment avoidance (Brennan, Clark & Shaver, 1998). Empirical research has shown that low attachment related anxiety and avoidance, conceptualized as secure attachment, is a protective factor against mental and physical illness (McWilliams et al., 2010; & Zhang et al., 2022). Secure attachment in adults may promote the quality of relationships as well as aiding the establishment of new ones, since their relational priors are less burdened by experiences of deprivation or dismissal. While the effects of therapist attachment orientation on outcomes have largely been neglected by researchers (Slade, 2016), therapist attachment security might positively affect therapist’s emotional regulation skills – that together promote therapist-patient rapport and alliance (Ruiz-Aranda et al., 2021). The affect-regulating role of the attachment system has been previously demonstrated by research like that of Mikulincer and colleagues (2003). While the effects of therapist attachment orientation on outcomes have not been conclusively studied, it might impact several traits relevant for the therapeutic process like the quality of the therapeutic relationship as well as the therapist’s capacity for emotional regulation.

A recent paper by Cherniak and colleagues (2022) argued for the use of attachment theory to understand and predict some of the effects of psychedelics. Psychedelic-assisted psychotherapy is proposed to promote attachment security through the restructuring of inner working models, in part through the relaxation of cognitive priors that lead to reparative relational experiences with the guide or therapist. Additionally, attachment-related avoidance may predict more challenging psychedelic experiences through the use of more maladaptive defenses and reduced trust in the therapist. Only one study of psychedelic-assisted psychotherapy has incorporated measures of adult attachment (Stauffer et al., 2020). In this uncontrolled trial of demoralized long-term AIDS survivors, attachment anxiety was significantly reduced. Additionally, baseline attachment anxiety predicted greater degrees of mystical experience while baseline attachment avoidance predicted challenging experiences. Given the support for attachment theory as a general framework for understanding how prior experiences impact predictions and behaviors in relationships, and the proposed ability for psychedelics to restructure priors, psychedelic-assisted psychotherapy may induce changes in attachment orientation.

Although only one previous empirical study has made the connection between psychedelics and attachment, psychedelics have been shown to alter social cognition and function in other ways. A review article of research on the effects of serotonergic psychedelics on social cognition in humans and animals by Preller and Vollenweider (2019) has summarized some important findings on these effects. Psychedelics seem to improve social receptiveness and social learning through affinity with the serotonin 2A-receptor. They might also impact processes important for empathy such as facial affect recognition, further discussed in the following section. Improvements in social learning and empathy together with relaxed cognitive priors might therefore lead to a state of plasticity that might lead to greater attachment security. These processes together could also potentially affect the quality of alliance and rapport between therapists and patients.

**Psychedelics and emotional functioning**

As discussed previously, psychedelics seem to impact brain networks involved in emotional processing and social learning through neuroplasticity and relaxed prior beliefs. Some have related these findings to a postulated reopening of critical learning periods, colloquially known as “afterglow”, in the days and weeks following a psychedelic experience (Lepow et al., 2021). According to this hypothesis, the neuroplasticity-promoting properties of psychedelics are particularly conducive to changes in behaviours, attitudes, emotions, and traits, either from psychotherapy or from other environmental factors during and immediately following a psychedelic experience. The plasticity-promoting properties of the serotonin 2A receptor that psychedelics like psilocybin binds to has been demonstrated, partly through the release of the protein BDNF (de Vos et al., 2021).

Emotional regulation skills might be another relevant target for psychedelic-assisted therapy. While there are no experimental studies on the effects of psilocybin on emotion regulation, one
population sample demonstrated a negative correlation between lifetime psychedelic use and intimate partner violence that was mediated by increased emotional regulation skills amongst psychedelic users (Thiessen et al., 2018). While this study does not provide us any conclusions about a causal relationship between psychedelics and emotional regulation, the previously demonstrated effects of psychedelics on important emotional functions shows that psychedelics do have a certain positive impact on these functions. Apart from “bottom-up” changes in emotional functioning from increased neuroplasticity and altered brain networks, there are indications that specific phenomenological features of the psychedelic experience may also induce “top-down” effects on psychological factors through learning. While there are clear indications that serotonergic psychedelics affect emotional functioning, the processes of change are not completely understood.

**Emotional breakthrough as a corrective emotional experience?**

Clinical trials of psychedelic-assisted psychotherapy have shown a positive association between certain participant-rated acute phenomenological effects during the dosing session and long-term clinical outcomes (Roseman et al., 2018b). Psychedelics have shown the ability to cause so-called mystical-type states as rated by the mystical experience questionnaire (MEQ, Pahnke & Richards, 1966; Barrett et al., 2015). The MEQ scale has been found to predict depression symptom reduction, reduced cancer-related distress, and increased mood and well-being to a greater extent than general participant-rated intensity of psychological effects (e.g., Griffiths et al., 2016). Apart from the MEQ, there exist other specific components of the psychedelic experience may contribute to clinical outcomes. Psychedelic-induced challenging experiences featuring psychological distress and anxiety have shown to have a certain relationship with iatrogenic negative outcomes (Barrett et al., 2016; Roseman et al., 2018b). One other aspect of psychedelic phenomenology that has been recently studied and purported to have a greater positive effect on therapeutic outcomes than mystical experiences are emotional breakthroughs (e.g. Carhart-Harris et al., 2021; Murphy et al., 2022). These experience as operationalized by the emotional breakthrough inventory (EBI, Roseman et al., 2019) are defined as accessing and processing previously unconscious emotions and memories.

There are some indications that psychedelic-assisted psychotherapy has certain common therapeutic mechanisms to some conventional psychotherapies. For example, one study showed an association between the subject-rated quality of the therapeutic alliance prior to dosing and the rates of mystical experience and emotional breakthrough experienced during the psychedelic session, which in turn correlated with greater reductions in depression symptoms (Murphy et al., 2022). Interestingly, emotional breakthrough had a significant positive effect on the therapeutic alliance as measured after the psychedelic experience – an effect that could not be observed between mystical experience and emotional breakthrough. This might indicate that, while correlated with a strong subjective drug effect, mystical experience and emotional breakthrough are distinct phenomena that affect different psychological processes. If emotional breakthroughs during psychedelic psychotherapy leads to greater therapeutic alliance and increased attachment security, this concept could be interpreted to has some commonality with the “corrective emotional experience” as conceived by Alexander and French (1946). The corrective emotional experience was defined as an “intense re-experiencing of conflicting emotions in the transference” (Palverini, 2010), conceptually this has some degree of similarity to emotional breakthrough but with an increased emphasis on the transference relationship. Along with their pioneering work in developing and evaluating early forms of brief psychodynamic therapy, Alexander and French discussed the use of “narcosynthesis” to rapidly induce corrective emotional experiences in soldiers with “war neuroses”. The clinician would administer high doses of barbiturates or barbiturate-derivatives like sodium amytal within psychotherapy to loosen repressive defense mechanisms and access unconscious content that could later be integrated and analysed to resolve symptoms of trauma or intrapsychic conflict. While differing to a large extent in context and content to modern psychedelic therapy, narcosynthesis is an early example of a combinatory pharmacological and psychotherapeutic treatment where the subjective drug experience plays a role in facilitating the therapeutic relationship and, in turn, the therapeutic result.

Alexander and French’s theory of corrective emotional experience have also had an influence on the development of modern experiential dynamic psychotherapy modalities such as ISTDP (Palverini, 2010). Further research into psychological processes relevant for outcomes of psychedelic
therapy may be informed by experiential psychodynamic theory by investigating the importance of emotional breakthroughs as corrective emotional experiences that lead to restructuring of defense mechanisms, resolution of conflicted unconscious affects and anxiety that lead to increased well-being. Psychodynamic theory may also provide insight into findings like those of Murphy and colleagues (2022) that showed how emotional breakthroughs during a therapist supervised psychedelic session both was predicted by and lead to increases in patient-therapist alliance and rapport.

**Therapist training, therapist effects and psychedelics**

A debated topic among practitioners of psychedelic-assisted therapy is whether those administering these treatments should have personal experience with altered states of consciousness. This debate is ongoing despite the fact of there being no research on the effect of therapist self-experience on clinical outcomes. While the effects are unclear, the practice is likely common. In one recent study, 28 out of 32 participating therapists in a phase II trial on psilocybin-assisted therapy for major depressive disorder reported having used serotonergic psychedelics themselves at some point (Aday et al., 2023). Like within other therapeutic modalities like psychoanalysis or mindfulness-based therapy, therapists having personal experience of treatment has long been recommended (Nielsen & Guss, 2018). First-hand psychedelic experience was common practice in the training of psychedelic therapists in the 50s and 60s (Phelps, 2019), and is still offered as an optional part of programs like MAPS’ MDMA therapy training program (MAPS, 2023). Common rationales for therapist self-experience include facilitating empathy and trust with patients in a psychedelic-induced altered state of consciousness, sometimes by using self-disclosure (Nielsen & Guss, 2018). At the same time, personal experience with psychedelics or other altered states of consciousness are usually only considered a small but important part of the psychedelic therapist toolkit, along with general psychotherapeutic skills like being able to establish rapport and alliance (Phelps, 2019). Others warn about the potential for psychedelic self-experience to induce a bias in researchers and therapists that may lead to inflated promises, as well as potentially reducing the trust that certain patients have for the therapist (Nielsen & Guss, 2018). However, one survey of the preferences of 803 people with depressive symptoms showed that having a psychedelic-assisted therapist with personal experience of psychedelics was rated on average as at least “somewhat important” (Earleywine et al., 2022).

One area that has not received much attention in this area is whether psychedelic-assisted therapy could improve treatment outcomes through mechanisms other than enabling easier rapport-building through personal relating and self-disclosure. Decades of psychotherapy research has showed that psychotherapists vary in the therapeutic outcomes that they produce due to personal factors, so called therapist effects (Johns et al., 2019). Therapist effects are highly variable from study to study, ranging from explaining 0.2% to 29% of outcome variance in different studies, with an average effect of 5% (Johns et al., 2019). This disparity may likely be due to differences in measurement methodology and the specific factors measured. While a 5% average therapist effect is not large, studies have tended to show a large disparity between the results of top-performing therapists and average therapists (e.g., Delgadillo et al., 2020; Firth et al., 2015). Therapist effects may be due to several different factors of individual variance such as five factor personality profile (Delgadillo, 2020), facilitative interpersonal social skills (Anderson et al., 2009) and increased working alliance due to therapist-patient personality fit (Taber et al., 2011). Also, there is inconclusive evidence from some studies showing that therapist attachment orientation may affect treatment outcomes, particularly that secure attachment may contribute to alliance building (Lingiardi et al., 2017).

As previously discussed, psychedelics and psychedelic-assisted psychotherapy has consistently shown the potential of inducing changes in a range of psychological traits. These changes in traits might have an impact on psychotherapists and their work and outcomes. Studying therapists working within other modalities than psychedelic-assisted psychotherapy would show whether these effects, if they exist, could affect outcomes through other mediator pathways than increased ability to relate with altered states of consciousness. In particular, therapists’ ability to establish a working alliance may be aided by changes in personality, changes in the ability to process and tolerate complex emotions and through changes in attachment orientation.
Intensive short-term dynamic psychotherapy

Intensive Short-Term Dynamic Psychotherapy (ISTDP) is a brief, structured, affect-focused psychodynamic therapy modality developed by the Iranian Canadian physician and psychoanalyst Habib Davanloo in the 1970s (Abbass & Town, 2013). The theory, or metapsychology, and technique of ISTDP have influenced several other therapeutic approaches that are included under the umbrella term of experiential dynamic therapies (EDT). Examples of such methods are attachment based ISTDP, affect phobia therapy, and accelerated experiential dynamic psychotherapy (IEDTA, 2022). ISTDP and other EDTs have a growing base of evidence for their efficacy in treating depression and anxiety disorders and improving quality of life (Liliengren et al., 2016). The metapsychology of ISTDP can be summarized with the model of the triangles of conflict and person, developed by David Malan (1986) based in part on the work of Alexander and French. The conflict triangle states that psychological symptoms are caused and upheld through the compulsive use of maladaptive defenses against the experience of anxiety, which is a consequence of unconscious unintegrated mixed feelings. Particularly, a mix of rage and love towards important figures that gives rise to guilt. Due to prior experiences of not being able to express these feelings in prior relationships, the person feels the need to avoid and suppress them in current relationships. This is the psychoanalytic concept of transference, as summarized by Malan in the person triangle.

ISTDP aims to help the patient experience and express emotions like rage within the context of the therapeutic relationship as a form of corrective emotional experience. To achieve this aim, ISTDP technique is focused on assessing and inquiring about the patient’s experience of basic affects and anxiety, as well as their use of defense mechanisms suppressing or avoiding these emotions. Through re-evaluating and restructuring the patient’s use of defenses, they can build tolerance for anxiety and achieve symptom relief (Frederickson, 2013). To aid in assessing the patient’s affective state, ISTDP puts a great emphasis in reading and interpreting affective, non-verbal cues from the patient’s body. The therapist also pays close attention to their own mental, affective, and physiological states in the therapy since countertransference signals is seen as a part of how the patient communicates. If psilocybin increases emotion recognition capacity, this could translate into increased diagnostic skills within ISTDP. ISTDP is an intensive treatment that tries to promote experience and expression of strong feelings towards the therapist, which may put a strain on the therapist. This process could also be impaired due to countertransference problems resulting from the therapist’s own relational history and attachment orientation, as well as their own difficulties in facing anxiety and conflicting emotions. As the expression of strong emotions like grief and rage is such a central part of the therapeutic process, ISTDP and EDT therapists might be benefited by a high degree of affect tolerance and emotional regulation skills themselves.

Due in part to the therapist’s actively inquiring and challenging stance within ISTDP, practitioners like Johannes Keding have characterized ISTDP as a modality with a high risk of rupture and misalliance (Hesslow, 2022). While no comparative studies have been conducted to examine whether this is more true for ISTDP as opposed to other modalities, a recent paper on ISTDP technique acknowledged that temporary alliance ruptures might be expected within the model – and that they in turn can be used as an opportunity to improve the alliance through repair and reestablishment of therapeutic goals (Abbass & Town, 2021). This process may be aided through increased attachment security in the therapist. Apart from ISTDP’s emphasis on establishing and continually evaluating a therapeutic alliance based on the patient’s treatment goals, ISTDP also posits the existence of an unconscious therapeutic alliance (Davanloo, 1987). The UTA is viewed as the patient’s unconscious wishes to not use defenses, to emotionally connect with the therapist and ultimately to achieve psychological health. The ISTDP therapist is encouraged to pay attention to the patient’s UTA and use it as a cue for directing interventions, and ultimately using it to turn the patient’s conscious will against their maladaptive defenses. When the UTA becomes more manifestly mobilized in the therapy along with a rise in complex strong feelings, a so called “unlocking of the unconscious” may occur. This phenomenon can be likened to an altered state of consciousness where the content and developmental source of the patient’s intrapsychic conflicts becomes clear. Unlocking of the unconscious has been linked to greater outcomes within ISTDP (Johansson et al., 2014). Given the proposed role of secure therapist attachment as a promoter of establishing a therapeutic alliance, reduced attachment-related anxiety and avoidance may be of particular relevance for the processes of establishing an alliance and
making the unconscious therapeutic alliance conscious within ISTDP. Also, given that ISTDP and psychedelic-assisted psychotherapy both emphasize altered states of consciousness leading to emotional breakthroughs, the two approaches may potentially inform each other in novel ways.

Aims and context of this essay

To elucidate whether psilocybin may affect factors that could be of relevance to psychotherapists, we will conduct two separate studies using both qualitative and quantitative data from the naturalistic setting of psilocybin retreats. These two studies will both be reported within this essay. The mixed-methods nature of this project might allow for triangulation and reference points between both qualitative and quantitative data. Through this explorative approach, I aim to generate hypotheses in an area that hitherto has not received much attention from researchers. The retreats are organized in the Netherlands where psilocybin-containing truffles are not illegal, by the retreat company Nysnö (www.nysno.se). Nysnö is run by Swedish licensed psychologists, and they aim to promote personal psychological development through these retreats. While they do not provide psychotherapy services, they put great emphasis on providing a psychologically supportive environment as well as supportive counselling individually and in groups. The retreats took place over four days, two of which featured psilocybin truffle consumption. The first dosing day featured a dose of around 20 grams of truffles. During the second dosing day the participants were offered an option to increase the dose, ranging between 30 and 70 grams. The retreats were preceded and followed by group and individual meetings in person and over video conference.

Study 1 will focus on the collection of quantitative survey data on changes in emotional regulation skills and adult attachment orientation amongst Nysnö’s retreat participants. Both therapists and non-therapists will be included, to allow for a large enough sample to demonstrate changes. These surveys will be offered to all retreat attendees, not only psychotherapists. The study will also investigate whether some acute measures of the psychedelic experience like emotional breakthrough and mystical experience have a role in predicting these changes. I hypothesize that emotional regulation skills will increase, and that attachment-related anxiety will decrease. Additionally, I hypothesize that these changes will be predicted by the degree of emotional breakthrough experienced during the retreat.

Study 2 will focus on collecting and thematically analyzing the experiences of ISTDP therapists attending one of Nysnö’s retreats. The therapists will describe their experiences in two brief essays recorded on the same anonymous survey platform as study 1. The first is on potential differences and commonalities of change processes and metapsychological assumptions within ISTDP and psychedelics. The second is to investigate whether the participating therapists notice any clear differences in their clinical work in the weeks after the retreat. The purpose of the second study is two-fold: the first is to provide hypotheses that might contextualize the potential efficacy of psychedelic treatments within the framework of another psychotherapeutic modality. The second is to develop ideas relating to the main framing of this essay, on whether psychedelics might affect ISTDP therapists in their work.

In the conclusion of this essay, the results of both studies will be related to one another in order to explore some potentially relevant ways in which personal psychedelic experiences might impact therapeutic processes as mediated by potential changes in traits and dispositions.

The data for these studies were collected in the context of the larger project Psychedelia, attachment and wellbeing – a naturalistic longitudinal study following participants of psychedelic retreats. This project is headed by Dr. Joel Gruneau Brulin at the psychological institution at Stockholm University. The data collection was not finished by the time this essay was produced, hence longer follow-up measurements are not included.
Study 1: Changes in emotional regulation skills and adult attachment orientation after a psilocybin truffle-retreat.

As discussed in the introduction, psilocybin and psilocybin-assisted psychotherapy has shown the potential to alter emotional functioning during and after drug administration. However, a causal relationship between psilocybin use and increases in emotional regulation skills has yet to be demonstrated. One study did however show a population-level correlation between emotion regulation and psychedelic use, that together seemed to correlate with reduced levels of intimate partner violence (Thiessen et al., 2018). As presented above, emotional regulation skills may also be a contributor to therapist effects. In this study, I will investigate self-reported emotional regulation skills before and 2 weeks after a psychedelic retreat, with the hypothesis that they will increase.

It has been suggested that attachment security might serve as a valid outcome target from psychedelic therapy (Cherniak et al., 2022), which is supported by evidence from one uncontrolled study (Stauffer et al., 2020). Given the impact of attachment orientation for relational and psychological well-being in addition to the evidence for therapist attachment style as a predictor of therapeutic alliance and rapport, this study will also investigate changes in self-reported attachment in the sample. I hypothesize that the results will align with the previous findings by Stauffer and colleagues (2020) and show reductions in attachment anxiety. The hypotheses were pre-registered on Open Science Framework prior to any data collection (https://osf.io/zwn6m).

Additionally, psychodynamic theories like Malan’s triangles (1986) and Alexander’s concept of the emotionally corrective experience indicate that access to unconscious, affectively laden material may result in greater capacity to handle emotions and relationships successfully. The related concept of emotional breakthrough from psychedelics might serve as a predictor of these effects. As a secondary hypothesis, I posit that emotional breakthrough will predict positive changes in attachment orientation and emotional regulation skills. Previous studies have also implicated the importance of mystical experiences for predicting outcomes from psychedelics and this factor will also be included. Measures of phenomenological aspects of the acute psychedelic experience will be made using validated self-report measures.

Method

Participants

Participants in the survey were recruited among psychedelic retreat-attendees through invitation by the staff at Nysnö. Nysnö regularly conduct their retreat program, and data was collected from several of these retreats. Retreats have spots for 15 to 25 attendees each, though sometimes not all spots are filled. To qualify for Nysnö’s psilocybin truffle retreat program participants must be above 18 years of age and undergo a medical and psychological screening process where prospective attendees were assessed for psychological or physical risk factors such as bipolar disorder, heredity for psychosis, untreated high blood pressure and history of heart disease or stroke. Prospective retreat applicants were also excluded for being on medications that are associated with heightened risk of negative interaction effects with psilocybin.

At the time of writing, 50 people had completed surveys at baseline, during the retreat and at two weeks follow-up after returning home. 56% of participants identified as female (N = 28) while the remaining 44% identified as male. (N = 22) Average participant age was 48.2 years (SD = 10.6). 88% (N = 44) of participants chose to take surveys in Swedish language while 12% (N = 6) chose English.

Procedure

After electing to participate in the study, retreat attendees were given a link to information of this study on the research web platform Psychedelic Survey (https://www.psychedelicsurvey.com) where they could register as study participants with their personal email address, which was encrypted and stored by Psychedelic Survey. The Swedish Ethical Review Authority was consulted for an advisory statement on whether this study required ethical review. Because of the anonymous, non-identifiable nature of data collection, they confirmed that a review was not required (Diary number 2022-03652-01).
Links were automatically sent out to the participants for each survey on the survey platform Qualtrics to the participants through Psychedelic Survey. Using Qualtrics, participants did not need to provide any identifiable information enabling us to preserve participant anonymity. Data collection is longitudinal, with links being sent out to survey participants at two weeks before the retreat (T1), 48 hours before the retreat (T2), 24 hours after the retreat (T3), two weeks after the retreat (T4) as well as follow-up at three, six, and twelve months after the retreat (T5, T6 and T7). Participants were sent one reminder to respond to the surveys per time point through Psychedelic Survey. The survey is planned to continue for more than one more year after completion of this thesis. Due to the lack of participants having completed longer follow-up measurements at the time of writing, T4 was selected as a cut-off for this report.

**Self-evaluation forms**

The Emotion Regulation Skills Questionnaire (ERSQ-27, Grant et al., 2018) is a validated questionnaire used to measure an individual's self-reported ability to regulate emotions. The 27 items of the scale are divided into 9 different skills, such as emotional awareness, acceptance, and modification. In the validation of the instrument, it was found that these skills, operationalized as subscales, have high internal validity (Cronbachs α = .96). Only the full scale ERSQ measure will be used in this study. Emotion regulation skills have some conceptual and empirical relationship to mature and adaptive psychodynamic defenses (Sala et al., 2015). ERSQ scores are represented on a 0-to-4-point scale average of each item. The ERSQ-27 was administered at T1 and T4. Some examples of survey items include: Last week... I could endure my negative feelings, ...I was aware of why I felt the way I felt, ...my physical sensations were a good indication of what I was feeling, ...I did what I wanted to do even if I had to face negative feelings on the way.

The Experiences in Close Relationship Scale Short-Form (ECR, Wei et al., 2007) is a 12-item validated self-report measure of attachment orientation based on Brennan, Clark, & Shaver’s (1998) original longer measure. The questionnaire comprises two different scales of attachment orientation: anxiety and avoidance. The two scales have been found to have high internal consistency (Cronbachs α Anxiety = .86, Avoidance = .88) and weak correlation (r = .28), allowing a measure of two dimensions of adult relational functioning. Low scores on both scales are interpreted as more secure attachment orientation. ECR scores of each scale are computed as the sums of six 1-to-7-point survey items, for a potential maximum of 42 points. The ECR was administered at T1 and T4. Some examples of anxiety items include: I worry about being abandoned, If I cannot get my close ones to show interest in me, I get upset (sad or angry). Some examples of avoidance items include: It does not feel good to me to open myself completely to others, I tell pretty much everything to my close ones (reverse scored).

The Emotional Breakthrough Inventory (EBI, Roseman et al., 2019) is a validated self-report questionnaire consisting of 6 statements that describe the experience of emotional breakthrough during a psychedelic experience. The questionnaire was developed to operationalize the experience of confronting repressed emotions and memories. The 6 items of the EBI were found to have high internal consistency (Cronbachs α = .93). The degree of emotional breakthrough during psychedelic-assisted therapy has been shown to correlate with clinical outcomes (Murphy et al., 2022; Roseman et al., 2019). EBI scores are represented on a 1-to-100-point scale average of each item. The EBI was administered at T3. Some examples of survey items include: During my experience... I achieved an emotional release followed by a sense of relief, I was able to get a sense of closure on an emotional problem, I felt able to explore challenging emotions and memories.

The Revised Mystical Experience Questionnaire (MEQ30, Barrett et al., 2015) is a validated 30-item questionnaire designed to assess the experience of so-called mystical states of consciousness elicited by psychedelics. These states are characterized by features such as experiencing positive mood, alterations of temporal and spatial perception, a quality of sacredness and inherent meaning, and unity of consciousness and nature. The full-scale MEQ30 was found to have acceptable internal validity (Cronbachs α = .67) and reliability and has been used to predict long-term changes in attitudes, behaviors and well-being in clinical psychedelic therapy research (Roseman et al., 2018b). MEQ scores are represented on a 0-to-5-point scale average of each item. The MEQ30 was administered at T3. Example items include: During my the experience I felt...Sense of reverence, Feelings of tenderness and gentleness, Feeling that it would be difficult to communicate your own experience to others who have...
not had similar experiences, Experience of the insight that “all is One”, Experience of unity with ultimate reality.

Participants were allowed to choose English or Swedish versions of the questionnaires. Full English versions of all administered forms are provided in the appendix.

Data analysis

The survey data from all participants who had completed self-report measures at T1, T3 and T4 was downloaded and cleaned up using Microsoft Excel. Statistical analyses were computed using JASP v0.16.3.0. Analyses used included descriptive statistics, correlation analyses between variables, Student’s T-tests for statistical significance of differences of pre-/ post intervention measures, and multiple linear regression analyses to compute partial effects of covariates and predictors on changes in the dependent variable.

Results

To investigate whether self-rated attachment orientation and emotional regulation skills were affected by the retreat, I first compared the baseline survey data with the same surveys at two-weeks follow-up. Due to survey input error, one participant was excluded from the follow-up ECR measurement. Descriptive statistics of each measurement variable are provided in table 1. Paired-samples Student’s T-tests were computed for each outcome variable between baseline and two-week post-retreat follow-up and reported in table 2. Due to repeated significance testing, Bonferroni corrections to p-value significance limit of three T-tests were applied (p < .0167). Positive, moderate-to-strong post-retreat changes in emotional regulation skills were observed (d = .540, p = <.001) Moderate reductions in both attachment-related anxiety and avoidance as measured by the ECR were also observed (Anxiety: d = -.361, p = .015, Avoidance: d = -.371, p = .013). ECR anxiety and avoidance were not normally distributed within the sample, so additional Wilcoxon signed-rank tests were computed. The effects were still statistically significant (Anxiety: 𝑟𝑟𝑏 = -.471, p = .006. Avoidance: 𝑟𝑟𝑏 = -.437, p = .008). The observed increases in emotional regulation skills and attachment security confirm our primary hypothesis. We did not expect the observed reductions in attachment avoidance.

Table 1

Descriptives for each measurement scale including valid data, excluded data, means, standard deviations, minimums, and maximums.

<table>
<thead>
<tr>
<th></th>
<th>ERSQ T1</th>
<th>ECR Anx. T1</th>
<th>ECR Avo. T1</th>
<th>ERSQ T4</th>
<th>ECR Anx. T4</th>
<th>ECR Avo. T4</th>
<th>MEQ</th>
<th>EBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>49</td>
<td>49</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.53</td>
<td>20</td>
<td>21.52</td>
<td>2.89</td>
<td>17.61</td>
<td>18.88</td>
<td>3.29</td>
<td>66.07</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.75</td>
<td>9.06</td>
<td>5.14</td>
<td>0.67</td>
<td>8.15</td>
<td>7.9</td>
<td>1.3</td>
<td>25.42</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.48</td>
<td>6</td>
<td>9</td>
<td>0.56</td>
<td>6</td>
<td>6</td>
<td>0.47</td>
<td>0</td>
</tr>
<tr>
<td>Maximum</td>
<td>3.96</td>
<td>37</td>
<td>33</td>
<td>3.89</td>
<td>34</td>
<td>41</td>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>

ERSQ = Emotional Regulation Skills Questionnaire. ECR Anx. = Experiences in Close Relationship Scale, anxiety factor. ECR Avo. = Experiences in Close Relationship Scale, avoidance factor. MEQ = Revised Mystical Experience Questionnaire. EBI = Emotional Breakthrough Inventory. T1 = Baseline. T4 = Follow-up.
Table 2

Paired sample Student’s T-tests comparing outcome measures at baseline and follow-up.

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Follow-up</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>Mean change</th>
<th>SE change</th>
<th>95% CI for change</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERSQ T1</td>
<td>ERSQ T4</td>
<td>3.821</td>
<td>49</td>
<td>&lt; .001</td>
<td>0.360</td>
<td>0.094</td>
<td>0.172 to 0.550</td>
<td>0.540</td>
</tr>
<tr>
<td>ECR Anx. T1</td>
<td>ECR Anx. T4</td>
<td>-2.525</td>
<td>48</td>
<td>0.015</td>
<td>-2.612</td>
<td>1.035</td>
<td>-0.532 to -4.692</td>
<td>-0.361</td>
</tr>
<tr>
<td>ECR Avo. T1</td>
<td>ECR Avo. T4</td>
<td>-2.594</td>
<td>48</td>
<td>0.013</td>
<td>-2.673</td>
<td>1.031</td>
<td>-0.601 to -4.746</td>
<td>-0.371</td>
</tr>
</tbody>
</table>

ERSQ = Emotional Regulation Skills Questionnaire. ECR Anx. = Experiences in Close Relationship Scale, anxiety factor. ECR Avo. = Experiences in Close Relationship Scale, avoidance factor. T1 = Baseline. T4 = Follow-up.

To begin investigating the secondary hypothesis of whether acute measures of the psychedelic experience could predict changes at follow-up, Pearson correlation tests between predictor and outcome variables were computed and reported in table 3 below. Baseline measures of emotional regulation skills and attachment correlated moderately-to-strongly with their respective follow-up measure. The ECR factors of attachment-related anxiety and avoidance were not significantly correlated to each other during baseline or follow-up. Baseline emotional regulation skills had moderate negative correlations with baseline anxiety and avoidance, being slightly stronger for anxiety. However, during follow-up, this relationship only remained between emotional regulation and avoidance. Measures of emotional breakthrough and mystical experience during the psychedelic experience had a positive, moderate-to-strong correlation to each other. Baseline attachment-related anxiety, but not avoidance, correlated moderately with mystical experience, but not with emotional breakthrough. Follow-up emotional regulation correlated moderately with both emotional breakthrough and mystical experience. None of the measures of the acute psychedelic experience correlated with follow-up attachment measures.

Table 3

Pearson’s r correlation coefficients between all predictor variables and outcome variables at baseline and 14-day follow-up.

<table>
<thead>
<tr>
<th>Variable</th>
<th>ERSQ T1</th>
<th>ECR Anx. T1</th>
<th>ECR Avo. T1</th>
<th>MEQ</th>
<th>EBI</th>
<th>ERSQ T4</th>
<th>ECR Anx. T4</th>
<th>ECR Avo. T4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERSQ T1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ECR Anx. T1</td>
<td>-0.422 **</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ECR Avo. T1</td>
<td>-0.305 *</td>
<td>0.181</td>
<td>—</td>
<td></td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>MEQ</td>
<td>0.108</td>
<td>0.318 *</td>
<td>0.136</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>EBI</td>
<td>0.162</td>
<td>0.162</td>
<td>0.102</td>
<td>0.539 ***</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ERSQ T4</td>
<td>0.565 ***</td>
<td>-0.181</td>
<td>-0.193</td>
<td>0.403 **</td>
<td>0.472 ***</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ECR Anx. T4</td>
<td>-0.258</td>
<td>0.648 ***</td>
<td>0.139</td>
<td>0.156</td>
<td>0.054</td>
<td>-0.150</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ECR Avo. T4</td>
<td>-0.305 *</td>
<td>0.133</td>
<td>0.455 **</td>
<td>-0.035</td>
<td>-0.100</td>
<td>-0.440 **</td>
<td>0.224</td>
<td>—</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001
ERSQ = Emotional Regulation Skills Questionnaire. ECR Anx. = Experiences in Close Relationship Scale, anxiety factor. ECR Avo. = Experiences in Close Relationship Scale, avoidance factor. MEQ = Revised Mystical Experience Questionnaire. EBI = Emotional Breakthrough Inventory. T1 = Baseline. T4 = Follow-up.
To investigate whether the subjective components of the acute psychedelic experience could predict changes in attachment and emotional regulation skills, stepwise multiple linear regression models were computed with mean changes in ERSQ and ECR as dependent variables. MEQ and EBI were included as predictor variables, with baseline measures of the dependent variables included as covariates. The null hypothesis was that the predictor variables would not significantly affect variance in outcomes, while the alternative hypothesis postulated that emotional breakthrough and mystical experience would affect outcomes. Since emotional breakthrough and mystical experience correlated by $r = .539$, collinearity diagnostics were performed on the predictor variables. Since the variance inflation factors (VIF) of all predictor variables and covariates were low (VIFs between 1 and 2) collinearity of predictors could be rejected.

I computed a stepwise multiple regression analysis to examine the degree to which the measures of the acute psychedelic experience could predict changes in emotional regulation. A multiple regression model including only the confounding covariates of baseline emotional regulation and attachment could predict 28% of the variance in changed emotional regulation skills ($R^2 = 0.280$, $p = <.001$). This effect was only attributable to a negative effect of baseline emotional regulation skills on change in emotional regulation skills. This would imply that those with lower baseline emotional regulation skills saw greater improvements than those with high scores at baseline. When I included mystical experience questionnaire scores in the model, it could predict an additional 12% of variance in changed emotional regulation skills ($R^2 = 0.402$, $p = <.001$). Finally, the regression model including confounding covariates, mystical experience and emotional breakthrough added an additional 6% of explained variance for a total of 46%, and the null model could be rejected ($R^2 = 0.460$, $p = <.001$). Partial correlation coefficients for predictor and covariate effects on emotional regulation skills are shown below in table 4.

While much of this effect could be accounted by baseline levels of emotional regulation skills as a covariate, features of the psychedelic experience also positively predicted some of the change in outcomes. For each 10 additional points on the 100-point EBI scale, ratings of emotional regulation skills on the 0-to-4-point ERSQ scale increased by .08 points (95% confidence interval = 0.01 to 0.15, $p = 0.021$). Also, each point on the 0-to-5-point MEQ scale predicted an increase of .127 points on the ERSQ, although this effect was not significant in the final model (95% confidence interval = -0.01 to 0.264, $p = 0.068$). Baseline attachment did not impact changes in emotional regulation skills due to the psilocybin retreat. The association between measures of the acute psychedelic experience and changes in emotional regulation skills are visualized as correlation lines in figure 1 below.

The multiple regression analyses for changes in attachment showed that neither emotional breakthrough or mystical experience could account for any amount of the variance in the avoidance or anxiety scales. The alternative model for attachment-related anxiety predicted 19% of the variance in outcomes, and the null hypothesis could be rejected ($R^2 = 0.191$, $p = 0.014$). This could however not be accounted for by any measures of the acute psychedelic experience, with the only significant covariate being baseline attachment-anxiety. No measures significantly predicted the observed reductions in attachment-avoidance, and the null model was not rejected ($R^2 = -0.002$, $p = 0.442$).
Table 4

Table of partial regression coefficients for effects of predictors and covariates on changes in emotional regulation skills.

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized</th>
<th>Standard Error</th>
<th>Standardized</th>
<th>t</th>
<th>p</th>
<th>95% CI</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₀ (Intercept)</td>
<td>0.360</td>
<td>0.094</td>
<td>3.821</td>
<td>&lt;.001</td>
<td>0.171</td>
<td>0.550</td>
<td>692</td>
<td>1.446</td>
</tr>
<tr>
<td>H₁ (Intercept)</td>
<td>1.522</td>
<td>0.523</td>
<td>2.910</td>
<td>0.006</td>
<td>0.468</td>
<td>2.577</td>
<td>401</td>
<td>1.480</td>
</tr>
<tr>
<td>EBI</td>
<td>0.008</td>
<td>0.003</td>
<td>0.303</td>
<td>2.404</td>
<td>0.021</td>
<td>0.015</td>
<td>0.692</td>
<td>1.446</td>
</tr>
<tr>
<td>MEQ</td>
<td>0.127</td>
<td>0.068</td>
<td>0.248</td>
<td>1.871</td>
<td>0.068</td>
<td>-0.010</td>
<td>0.264</td>
<td>0.626</td>
</tr>
<tr>
<td>ERSQ T1</td>
<td>-0.641</td>
<td>0.113</td>
<td>-0.725</td>
<td>-5.673</td>
<td>&lt;.001</td>
<td>-0.869</td>
<td>-0.413</td>
<td>0.676</td>
</tr>
<tr>
<td>ECR Anx. T1</td>
<td>-0.009</td>
<td>0.009</td>
<td>-0.117</td>
<td>-0.926</td>
<td>0.359</td>
<td>-0.027</td>
<td>0.010</td>
<td>0.686</td>
</tr>
<tr>
<td>ECR Avo. T1</td>
<td>-0.015</td>
<td>0.015</td>
<td>-0.113</td>
<td>-1.001</td>
<td>0.322</td>
<td>-0.044</td>
<td>0.015</td>
<td>0.872</td>
</tr>
</tbody>
</table>

ERSQ = Emotional Regulation Skills Questionnaire. ECR Anx. = Experiences in Close Relationship Scale, anxiety factor. ECR Avo. = Experiences in Close Relationship Scale, avoidance factor. MEQ = Revised Mystical Experience Questionnaire. EBI = Emotional Breakthrough Inventory. T1 = Baseline.

Figure 1

Scatter plots with Pearson $r$-correlation coefficient lines with 95% confidence intervals between rate of change in emotional regulation skills and rate of emotional breakthrough and mystical experience.

Summary

The aims of study 1 was to investigate whether self-rated emotional regulation skills and attachment orientation would be affected by a psilocybin retreat. Based on available evidence and theoretical reasoning I hypothesized that attachment-related anxiety would decrease, and emotional regulation skills increase. The results largely confirmed my hypothesis and showed a moderate-to-large increase in emotional regulation skills as measured by the ERSQ and moderate decreases of attachment-related anxiety and avoidance as measured by the ECR-scale two weeks after a psilocybin retreat. While I observed reductions in both measures of attachment insecurity, the previous study only showed reductions in anxiety (Stauffer et al., 2020). The improvements in the ERSQ could serve as a preliminary
indication of a causal relationship between psychedelic use and emotional regulation, of which a previous study showed a population-level correlation (Thiessen et al., 2018). Given the previously demonstrated role of acute phenomenological features of the psychedelic experience in predicting outcomes and from the theoretical construct of corrective emotional experience, I included a secondary hypothesis that greater degrees of emotional breakthrough during the retreat would predict outcomes. A stepwise multiple linear regression showed an effect of emotional breakthrough and a barely non-significant effect of mystical experience on increased emotional breakthrough. However, changes in attachment disposition were not affected by these measures. This was unexpected, given the growing evidence base for mystical experiences predicting long-term outcomes in terms of personality and symptom-reduction (MacLean et al., 2011; & Ko et al., 2022). Perhaps increases in attachment security were affected by variables that we did not measure, such as other experiential components of the psychedelic retreat, the supportive psychological environment or alliance with the facilitators. Confounding variables such as these might have also been responsible for some of the increases in emotional regulation, given that the partial regression coefficients for MEQ and EBI were not very large.

Other aspects of the data that were not part of the main hypotheses may also be related to previous findings. There was a negative correlation between emotional regulation skills and measures of attachment insecurity at baseline, which would fall in line with the proposed role of secure attachment in affect regulation (Mikulincer et al., 2003). However, this relationship was no longer significant during follow-up for attachment-related anxiety. Like the previous study by Staufer and colleagues (2020), baseline attachment anxiety correlated with greater degrees of mystical experience during the psychedelic experience. Prior findings have also demonstrated a relationship between disorganized attachment and spontaneous, non-psychadelic mystical experiences. This relationship has been related to a higher propensity for experiencing dissociative or absorbed mental states among those with less secure attachment organization (Granqvist et al., 2012).

Since this study included both therapists and non-therapists and incorporated no measurements or observations of any subsequent psychotherapy work, it does not allow for any conclusions on whether psychedelics have an impact on therapeutic processes or outcomes. However, both emotional regulation capacity and individual attachment disposition in psychotherapists may be of relevance for important therapeutic processes such as establishment of therapeutic alliance and rapport, and facilitative interpersonal skills. The results of study 1 indicate that attachment disposition and emotional regulation skills may be impacted by a psilocybin retreat, we might therefore extrapolate that this could be a relevant factor for psychotherapists using psilocybin for personal or professional development. In study 2, I will focus on investigating the experiences of therapists having attended a psilocybin retreat.

**Study 2: A thematic analysis of ISTDP therapists’ experiences during and after a psilocybin group retreat.**

The aim of this essay is to explore how use of psychedelics like psilocybin might affect psychotherapists. In the preceding study, I investigated changes in emotional regulation skills and attachment orientation in psilocybin retreat attendees. While these changes indicate that psilocybin might impact traits and abilities important for the work and outcomes of therapists, the sample of study 1 did not exclusively contain therapists. To further explore ways that the psilocybin experience and its potential effects impact therapists, this study will investigate the experiences of therapists attending one of the retreats together. I will explore how the psychedelic experience is affected, interpreted through, and related to the participant’s theoretical framework. Given prior research showing that psychedelics alter beliefs, this might also translate to metapsychological beliefs relevant for therapy. This might also generate new ideas on how the potential therapeutic action of psychedelics are viewed through the eyes of participants familiar with an unrelated therapeutic modality. The results of this study could illustrate whether psilocybin might induce meaningful changes in the work and outcomes of therapists, since I will also inquire about how the participants clinical practice might have been affected in the weeks after the retreat. The results of this study may be used to develop the debated topic of potential benefits and risks of therapists having their own psychedelic experiences.

Volunteer therapist-participants of the retreat will write brief essays on their experiences. This data will be compiled and presented in accordance with the method of thematic analysis (Braun & Clarke, 2006). The participants are all practitioners of ISTDP or other related modalities. ISTDP is an
intensive psychotherapy model where the therapist aims to remain continuously attuned to the emotional state of the patient and rapidly intervene according to their assessment of the patient’s needs and capacity (Frederickson, 2013). To this end, the establishment of a strong therapeutic alliance is seen as a necessity. If psychedelics were to promote attachment security, reduce anxiety and avoidance, enhance social learning processes and increase emotional regulation through use of more adaptive defenses, therapists working within ISTDP and related models could perhaps stand to gain clinically meaningful benefits. These potential changes might be particularly noticeable in the weeks immediately after a psychedelic experience, since some of the lingering social and emotional effects of psychedelics are proposed to be temporary and related to a reopened critical learning period.

Method

Participants

The participants of study 2 are therapists specialized in intensive-short term dynamic psychotherapy and/or other related experiential dynamic therapy methods. Participants were recruited among attendees for a psilocybin truffle retreat specifically organized for ISTDP/EDT practitioners. Participants were asked to sign up on the electronic survey platform Psychedelic Survey. The essay questions were sent out along with the quantitative survey questions for study 1. Demographic data was not collected for study 2.

Seven therapists participated in this study. When asked about their reasons for attending the retreat, participating therapists usually reported personal psychological or spiritual development, promoting interest and interaction about psychedelics among the ISTDP/EDT community, or intellectually exploring the relationship between their own therapeutic orientation and psychedelics. Therapists were of different nationalities and had the option to provide responses in English or Swedish, with only one choosing Swedish.

Procedure

Data was collected using the same anonymous survey method as study 1. For study 2, the essay questions were sent out at the same time as the two-week follow-up measure (T4). This survey focused on short essay questions on two main topics: (A) Participants thoughts on the relationship between ISTDP and psychedelic experience, and (B) if and how the psilocybin retreat had affected their own clinical practice and. See table 5 below for the specific formulations of the essay questions. Participants were asked to aim for text answers of 250 words per topic in English or Swedish. In addition, participants were asked for their intentions to take part in the retreat and given opportunities to offer comments or feedback to the researchers. The survey also included a question about spirituality that was excluded from this report. Given that this procedure is theory-driven and the questions quite directed, this may be viewed as deductive qualitative method.

Analysis

Participant responses were analyzed and compiled into categories according to common narrative themes. The analysis was carried out by the author based on the six-stage model of thematic analysis (Braun & Clarke, 2006), a commonly used qualitative research method within psychology to distinguish common themes of the experience of different people. Separate thematic analyses were conducted for each essay topic. Firstly, I familiarized myself with the data over a period of weeks by reading and rereading the data. Secondly, content extracts relevant to the three topics within all responses were compiled into separate codes reflecting basic meaningful segments of the data. Thirdly, these codes were sorted into themes according to common narrative elements. Codes that did not fit together within the themes were kept within a miscellaneous category. Fourthly, the themes were reviewed and iterated upon. Each individual data extract was re-examined in the context of the preliminary theme, re-evaluating whether they fit within the theme and the other codes within it. The themes were re-evaluated in comparison with their constituent codes and altered or discarded if not deemed to sufficiently capture a main common element. The themes were also evaluated in the context
of all participant responses, examining whether they captured the most salient features of the entire dataset and if they could tell a coherent story of the material. In the fifth stage, the themes were conclusively defined and given names that captured their contents. In the sixth step, the themes were presented in the form of this report and connected with specific text extracts from the participant responses. This process was repeated for each of the two topics.

This process could be influenced by some degree of author bias. I have some degree of prior understanding of and great enthusiasm towards both the topics of ISTDP and of psychedelics. Additionally, I am board member of a volunteer organization promoting psychedelic science within Sweden. My analysis will be performed through the lens of someone familiar with the discourse of these two fields. Given that this study is deductive and my enthusiasm going into this project, the framing and formulation of research questions might also be influenced by researcher bias. However, a prior understanding of these topics may also be required in understanding certain lines of reasoning among the participants – given that I ask about the metapsychology of ISTDP and their views on the psychedelic experience.

**Table 5**

Short essay prompts for the ISTDP/EDT practitioners.

<table>
<thead>
<tr>
<th>Topic A: How the metapsychology of ISTDP relates to psychedelics.</th>
<th>How do the perspectives you have gained from your ISTDP/EDT background relate to the perspectives you have gained from psychedelic experience(s)? How have your personal views on the metapsychology of EDT/ISTDP changed as a consequence of your retreat experience(s), if at all? Please provide specific examples, both from your retreat experiences and from different topics within EDT/ISTDP. Aim for ~250 words, but you’re very welcome to write longer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic B: Experience of psychotherapy practice being affected by the psilocybin retreat.</td>
<td>How have your clinical work with patients and identity as a therapist changed as a consequence of the retreat, if at all? Please provide specific examples, both from the retreat and from your clinical practice. Aim for ~250 words, but you’re very welcome to write longer.</td>
</tr>
</tbody>
</table>

**Results**

Here, the thematic analyses of the responses for each essay topic are reported. Of the 7 responders, not all responded to each topic and not all responses reached the length of the suggested 250 words. The wordcounts of each response for each topic are presented in table 6 below. While all 7 responders provided answers for topic A, only 6 participants provided answers for topic B. One participant (no. 5) responded in Swedish, while the others responded in English. All direct quotes are represented in the original wording, with misspellings and grammatical errors.
Table 6

Wordcounts of each participant response per essay topic.

<table>
<thead>
<tr>
<th>Participant ID</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic A</td>
<td>439</td>
<td>423</td>
<td>239</td>
<td>113</td>
<td>158</td>
<td>437</td>
<td>411</td>
</tr>
<tr>
<td>Topic B</td>
<td>0</td>
<td>163</td>
<td>111</td>
<td>70</td>
<td>179</td>
<td>88</td>
<td>216</td>
</tr>
</tbody>
</table>

**Topic A: How the metapsychology of ISTDP relates to psychedelics**

*Theme A1: ISTDP and psychedelics both elicit access to the unconscious through altered states of consciousness.*

The first theme describes certain similarities of processes occurring during the psychedelic experience and within ISTDP. Responders generally reported that their perspectives on ISTDP and experience with psychedelics complemented and illuminated each other. Responders often referenced Malan’s triangles and the ISTDP metapsychology in making sense of their psychedelic experience. Participants described the personal experience of having their own defenses loosened and dissolved, resulting in an experience of previously unconscious memories, thoughts, and emotions. Participants described a common emphasis within both psychedelics and ISTDP on altered states of consciousness as a method for psychological healing, reduction in anxiety and a resolution of defense mechanisms and symptoms. One participant went as far as suggesting that the emphasis on these states would classify ISTDP as a psychedelic psychotherapy modality, without the drug. In the following quote, one participant describes how certain techniques within ISTDP facilitate the same healing processes that the psychedelic state induces:

“Another element of overlap/connection between ISTDP and Psychodelic therapy is the importance of altered states of consciousness. Portrayals/unlockings are sure a form of an altered state of consciousness, in which someone is allowing a sort of ‘primal’ process to unfold within themselves. […] ISTDP creates this through portrayals/unlockings, and the psychedelic drugs create this through the drug experience.”

– Participant 2.

As illustrated by the above quote, some of the responders emphasized the importance of an internal autonomous “life force” that guides and facilitates the process of healing, a concept that has overlaps with the unconscious therapeutic alliance (UTA) in ISTDP and the inner healing intelligence in psychedelic therapy. Another participant described how the experience of the UTA or inner healing intelligence during their psychedelic experience gave them a direct experience of this phenomenon:

“In ISTDP there is the concept of the ‘unconscious therapeutic alliance.’ In psychedelic therapy there is the ‘inner healing intelligence.’ During my psychedelic therapy sessions I very strongly and directly experienced a powerful drive to persevere, overcome resistance, and face painful memories and feelings. This was active within me even during the most turbulent cognitive, perceptual, and emotional times. In retrospect, this felt like the ‘inner healing intelligence’ at work. I believe it is the same thing as the ‘unconscious therapeutic alliance,’ and as a result of my psychedelic experience I believe I have a more experiential understanding of this ISTDP concept.”

– Participant 7.
The broad picture that emerges is one where the therapist responders view the psychedelic experience as a powerful way of dissolving defenses and anxiety, letting unconscious material come up allowing for greater insight, connectedness, and functioning. The responders relate this to the way they understand change through a lens of ISTDP metapsychology. Some responders also mentioned the common emphasis on the body within both modalities, in particular on somatic processing of emotion. Finally, one participant reflected upon the importance of setting intentions prior to a psychedelic experience and how it is similar to the declaration of a concrete psychotherapeutic task before beginning an ISTDP therapy.

**Theme A2: Insights into theoretical limitations of ISTDP**

Several responders mentioned getting insights into aspects of ISTDP theory and practice that are counter to their ways of understanding the psychedelic experience. They emphasize how these experiences gave them ideas on how ISTDP could be expanded or corrected, and some reflect on how they could implement this into their practice. Within ISTDP metapsychology the experience of anger is often emphasized as central, as the model predicts that experiencing anger leads to a subsequent experience of guilt and loving feelings that leads to a reduction in anxiety and defenses. These perspectives do not necessarily conform to the experiences of participants during the retreat. Furthermore, some of the participants reported a conscious intention and expectation to explore and experience anger during their psychedelic experiences but not having their expectations met. These responders still reported lasting qualitative resolutions of psychological problems. They explained this through viewing the importance of anger being overemphasized within ISTDP in general or that experiencing rage was not personally that important for resolving their issues. One participant also suggested that unconscious grief about lost connection might be more or as important as unconscious guilt over repressed rage, and that the psychedelic experience gave them a corrective emotional experience of this:

“Where I was stuck was in unresolved grief, not guilt. And I foresee that working with the unresolved anger is the step in my process (although I have processed tons of rage in my own ISTDP therapy). I had inklings of protest in the midst of the grief over lost connection. But I now see that the missing piece for me was being supported/held in that grief, in order to have more capacity to feel the protest/anger. And I don’t think/feel that guilt prevents me from feeling the anger. That wasn’t my visceral experience both during the retreat and during ISTDP therapy. And now the way I’m seeing it is those patients that have these areas of fragility can’t possibly face their anger fully, until they’ve had a corrective experience of facing the tender feelings over the loss of connection, in relationship. A corrective relationship which shows them the way out, which is connecting with universal love or with an all loving attachment figure. So in summary, healing comes down to being held in unconditional love in the areas we are stuck/resisting.”

– Participant 6

In concurrence with the above quote, other participants also emphasize how the experience gave them insight into how the non-verbal loving and warm presence of the therapist may be more important than specific techniques and interventions that are often emphasized within ISTDP. One participant also reported how the psilocybin trip allowed for an experience of the unconscious therapeutic alliance as containing a wider range of narrative and emotional content than is usually seen within ISTDP. Another prominent feature of the data was that of ISTDP not sufficiently accounting for the spiritual and existential nature of psychological suffering, healing, guilt, and love that is more readily apparent during a psychedelic ceremony or therapy. The psychedelic retreat gave some participants a sense of the relevance of these spiritual aspects that some reported clashing with or shifting their views on the ISTDP metapsychology. One participant calls for an update of Malan’s triangles to incorporate “fourth corners” signifying God or oneness, stemming from a new belief that psychological suffering can stem from a resistance against connectedness with others and God. Another participant illustrates aspects of ISTDP metapsychology that miss some other spiritual aspects relevant to psychological well-being:
“My sense of ISTDP’s metapsychology has certainly shifted due to the psychedelic retreat. I believe ISTDP metapsychology does not sufficiently account for spiritual reality, including demonic energy, ‘attachments’, curses, etc. In my experience, spirituality is quite real, and can be underlying various symptoms, and these symptoms can be alleviated, even fully healed, with energetic interventions that do fall within ISTDP’s understanding of the mind. I also question whether ISTDP has a spiritual enough frame around guilt. Guilt is only possible if someone feels love, and it is love as a form of complexity/relatedness/spiritual emergence that perhaps could be more emphasized. What I mean is that guilt allows someone to reconnect with their ‘blocked becoming’… that energy inside them that wants to expand and grow. I think it is the blocking of this potent force, their creative expansive life force, that causes sickness. Guilt is a sign of it, but guilt is not the thing itself (in my current view) that is causing symptoms. I guess I have a more spiritual view, currently.”

– Participant 2

**Theme A3: Taking inspiration from the retreat into therapeutic practice**

A final theme of the responses to the first topic is one of having psychologically meaningful experiences that could be implemented as personally or clinically relevant changes. The data comprising theme 3 was generally more idiosyncratic or personal than in themes 1 and 2. One participant mentions how the retreat initially made them want to abandon the standard way of working with ISTDP and instead just offer love and understanding towards their patients. Another recalls how the experience solidified for them how healing is about offering acceptance and companionship in areas where patients feel stuck or alone. In the following quote, one participant recounts their experience of ego dissolution and surrender during the retreat, how it related to areas they were struggling with in their own therapeutic practice, and how they managed to integrate this experience of surrender into their practice to promote the expression of the unconscious therapeutic alliance within their patients:

“One specific example of an experience was of having my ego defeated or dissolved by the retreat experience and then what has been holding me back in therapy which is an ego idea of being defeated by the patient – this has been preventing me from offering HOCs in a way that truly lets go of the rope of responsibility for the patient. The experience of being defeated very much translated into being able to allow my patient’s ego to defeat my own and enabled me to surrender to something much higher than myself – thereby fully inviting or allowing the UTA to come into full force.” (*HOC = Head-on collision*)

– Participant 3.

Another participant emphasized how an experience of increased inner freedom inspired their way of viewing their own therapeutic role as one of promoting freedom, in a way that they relate to the importance of the importance of the non-verbal therapeutic stance emphasized in theme 2.

“My psychedelic experiences has shown me a way to find inner freedom, which I now can use as a guide when trying to help my patients be free in session. My understanding of the ISTDP metapsychology has moved in a more preverbal direction: helping the patient is not so much about what I say, it’s more about if I can find a peaceful, free space inside to meet the patient in his freedom. An example of this is that I now can really create quite a lot of pressure just by being emotionally present in silence with my patients.”

– Participant 1
Topic B: Experience of psychotherapy practice being affected by the psilocybin retreat.

**Theme B1: An increased emphasis on a calm, intuitive, less verbal therapeutic presence**

The first theme of topic B describes experiences of certain shifts in their therapeutic approach and identity. Several of the participating therapists mention experiencing a greater focus on non-verbal, intuitive information cues and interventions within their therapy practice after the retreat. This shift seems accompanied by a sense of calm and trust. This theme is both apparent in the therapists’ reading of their own psychological state (countertransference) as well as when gathering information from the patient. Some of the respondents seemingly indicate how this shift in therapeutic stance leads to more efficient interventions, that ultimately becomes helpful for the patient. One participant mentions that the retreat influenced them to pay greater attention to their own body and their own intuition when they are in a psychotherapy session:

“Since the retreat, I’ve become more intuitive, more trusting of my somatic countertransference, and more brave in my work. I am trusting my body, and following the physical cues inside myself to guide my interventions (noticing if its anger, or sadness, or distancing from me, etc). I’ve also started to listen to strange ‘intuitive hits’, and use interventions based on that. Its working surprisingly well. After the retreat, I had a sense of inner quiet and calm that my patients responded strongly to – as they sensed my inner peace, the UTA was stronger, and they seemed to allow themselves to feel their own lives more deeply while in my presence.”

– Participant 2

Another participant describes how the newfound sense of calm and presence allows for a change in the quality of certain interventions. They also give a quite striking example of a therapy session where silence was used as the main intervention for a whole session:

"It is easier to calmly offer closeness, but also to demand closeness/honesty when you yourself feel more open and honest. I have gained an increased understanding of the meaning of the therapist’s warmth, presence and eye contact, in the wordless, undemanding way. I feel that this helps me help the patients reach greater breakthroughs. I dare to sit silent more. One patient had lost their voice the week after the retreat, and we sat silently together for the whole visit, the patient had a breakthrough to sorrow and saw how she constantly takes on responsibility over the other, and how she thus loses contact with her inside.”

– Participant 5 (Translated from Swedish.)

In their response, Participant 6 explores the limited nature of only focusing on language within psychotherapy, in particular they go as far as categorizing language as a defense mechanism. They instead call for a greater emphasis on focusing on the body within psychotherapy, using both touch and presence:

“[…] words just don’t cut it. Words and language are a defense. So if we as therapists can speak directly (through touch and loving presence) to the client’s nervous system, then we have the best chance at healing.”

– Participant 6

**Theme B2: Increased ability to resist counterproductive relationship dynamics**

Another theme that was identified was one where the changes and insights induced by the psychedelic retreat seem to influence the relational interactions within the therapist-patient dyad. This seems somewhat related to the changes covered in theme 1. Participants describe specific examples of how relational patterns of the therapist that previously were an issue in working became clear and could
be resolved, resulting in more effective therapies. One of these seems to be that this newfound ability to be clear with the distribution of responsibility within the therapeutic situation. In this quote, the participant expresses how they feel more like of a witness that less often falls in the trap of feeling omnipotent and having to take over responsibility for the patient’s problem:

“"My identity is more of a ‘witness’ now. I see more clearly that my resources are limited. I am not at all some omnipotent force that can help people. I think that has brought an effect on my therapies, challenging some patterns of ‘taking over the problem’ from my end.”

– Participant 4

In another example, Participant 5 similarly expresses an increased ability to experience a clearer felt distinction between the responsibilities of patient and therapist. This also coincides with a higher quality therapeutic relationship where the therapist can be more attuned with their own emotions and the patient’s needs:

""I have an easier time with really experiencing the patient as their own, and that it is not up to me to solve the patient’s problem, while I also have a greater feeling of contact and love for the patients, as well as empathy with their suffering”

– Participant 5 (Translated from Swedish.)

It seems that several of the participants experience role diffusion between their own therapeutic responsibilities and their own emotional reactions to a lesser degree than before. This might also lead to a reduction in anxiety about confronting patient resistance, that is illustrated with the following quote:

“"I am enjoying my work greatly as I don’t fear resistance – I am able to hold my worth in therapy sessions and push back on patients when they reject or invalidate me in order to help them see what they are doing – before again I would take this too personally, gets anxious and avoid helping the patient own how they are treating me aka themselves”

– Participant 3

Summary

In study 2, we asked ISTDP therapists participating in a psilocybin retreat to describe their experience and how they relate to their theoretical views and clinical practice. In the thematic analysis for topic A, I have summarized some of the participants views of how the psychedelic experience relates to their theoretical views grounded in ISTDP metapsychology. In theme A1, examples of common or similar processes regarding psychological defenses and unconscious processes in both modalities are provided. This can be contrasted to theme A2, in which some therapists describe how parts of the ISTDP metapsychology may be reconsidered and updated with aspects related to the psychedelic experience. Finally, in theme A3, the participants provide examples of how their new insights have or could inspire their work in the future. For the second essay topic, participants describe how their clinical work has been impacted by the retreat. Theme B1 describes how participants experienced themselves as becoming more relaxed and emotionally attuned to their patients while having a less overbearing or overactive therapeutic stance. In the last theme, B2, participants describe a greater ability to avoid countertherapeutic relationship dynamics that previously became an issue in their treatments. Together, these results offer some interesting parallels between the psychedelic experience and ISTDP, as well as some examples of subjectively felt meaningful changes in therapeutic interventions and identity.

An interesting parallel was drawn between the ISTDP concept of the unconscious therapeutic alliance and the psychedelic-assisted psychotherapy concept of the inner healing intelligence. These concepts are used very differently within both modalities, as in ISTDP the UTA is used to direct active or challenging interventions while in psychedelic-assisted psychotherapy the inner healing intelligence is a rationale for an inactive therapeutic stance. However, the theoretical similarity of these proposed
processes as unconscious mechanisms for healing that can be accessed through an altered state of consciousness is striking, particularly since these important but poorly researched concepts have no known common lineage.

Some of the participant’s responses indicate suggestions on alterations to the ISTDP metapsychology that in turn could impact their work. A recurring topic here is a reduced emphasis on rage and guilt, emotions usually considered as crucially important in ISTDP. Grief over lost connection or “blocked becoming” are suggested as alternative causes for psychological suffering and symptoms. Insights such as these might impact what factors therapists pay attention to in their assessment and treatment of patients. Accompanied with the increased emphasis on a loving and understanding therapeutic identity, this could together lead to a less intense or rage-laden therapeutic dynamic.

Some participants reported a newfound emphasis of the importance of incorporating a spiritual framework in ISTDP. This includes framing suffering and symptoms as existentially or spiritually meaningful. Some participants also propose incorporating a metaphysical framework of God or the universe into the metapsychology of ISTDP, including “fourth corners” of Malan’s triangles representing universal love or God. Resistance against this universal love might give rise to suffering, in the views of some responders. These findings may be related to previous research indicating that psychedelics can alter metaphysical and spiritual beliefs (Timmermann et al., 2021). These results may potentially give insight into how altered metaphysical beliefs might influence the theoretical understanding of psychotherapists.

Discussion

The aims of these two studies were to explore how psilocybin might impact traits and processes relevant for psychotherapists. Attendees of legal psilocybin retreats volunteered to anonymously fill out quantitative and qualitative surveys. In the first study I investigated whether psilocybin might alter certain traits and skills relevant for therapist effects and the psychotherapy process in non-psychotherapists. In the second study I thematically analyzed brief essays on the experiences of therapists having undergone a psilocybin retreat to investigate how the psychedelic experience, and changes resulting from it, are perceived in relation to their theoretical framework. Also, the essays explored ways that the experience might have impacted their own clinical practice. Together, the purpose of conducting these different studies was to generate hypotheses for further research on the impact of psychedelics on the work of psychotherapists.

In study 1, attachment disposition and emotional regulation skills were measured before and two weeks after a retreat in 50 volunteers. I hypothesized that attachment anxiety would decrease while emotional regulation skills would increase. Secondarily, I hypothesized that these changes would be predicted by emotional breakthrough experience during the retreat. Our results showed that emotional regulation skills increased quite strongly while attachment anxiety decreased moderately, confirming the primary hypothesis. Moderate reductions in attachment avoidance were also observed. Emotional breakthrough was found to correlate with increased emotional regulation skills at follow-up, but this was not the case for emotional breakthrough and attachment. Therefore, the secondary hypothesis could only be partially confirmed. Mystical experience was also found to correlate with increases in emotional regulation skills, but not affect attachment. Also, baseline attachment related anxiety correlated with greater degrees of mystical experience. These results provide preliminary indications that psychedelics may positively affect two important constructs related to psychological functioning, that in turn could be of relevance for psychotherapists.

In study 2, seven ISTDP/EDT psychotherapists were administered two brief essay topics at two weeks after finishing a psilocybin truffle retreat. The first topic focused on how the metapsychology of ISTDP relates to the psychedelic experience, while the second investigated whether the participant’s own therapeutic practice were affected by the experience in any way. These essays were separately analyzed and summarized according to Braun and Clarke’s (2006) method of thematic analysis. For the first topic, three themes were produced. The first theme touches on different ways that the therapist’s own ISTDP-based metapsychological beliefs inform their own psychedelic experience. The second comprises some areas where the psychedelic experience disproved their prior metapsychological beliefs. Finally, the participants described various ways that the retreat inspired the way they would like to work in their future psychotherapy practice. For the second topic, two themes could be produced. The first
described how several participants discovered changes in their therapeutic stance towards a less verbally oriented intervening position. The final theme of the second topic compiles experiences of having more success with discovering and avoiding certain countertransference issues in therapy. These results represent some examples of potential intersections of theoretical constructs and therapeutic processes within two distinct modalities – ISTDP and psychedelics. This could be useful in further developments of theory within both areas. The results also give some indications towards relevant hypotheses and research questions for further studies on the effects of psychedelics on psychotherapists.

**Interpretation of results**

While approached through different methodologies and specific research questions, the two studies both focused on exploring subjective features of and changes related to a psychedelic retreat. To put the results in a broader perspective, I will here discuss some commonalities and potential intersections between the two studies. The self-scored survey data in study 1 aim to capture features of the participant’s experiences before, during, and after the retreat. These data along with certain features of the qualitative descriptions of the therapists’ own experiences in study 2 might be viewed as two sides of the same coin. All the same, we should remember that similarities or associations do not imply a causal or direct relationship between the two types of data.

The purported changes in attachment disposition and emotional regulation skills could be related to the subjectively felt changes in the therapist’s therapeutic work in the weeks after the retreat. Attachment theory posits that secure adult attachment could lead to more trusting and realistic relationships, since the internal working models are less primed by prior aversive relational experiences. Some parts of what the therapists describe in theme B2 of study 2 may be illuminated by this perspective. Experiencing a clearer distinction between the patient’s feelings and the therapist’s feelings accompanied with a clearer distribution of responsibility between the parties could be understood through decreases in attachment anxiety. Anxious attachment may be understood as an aggregate of “hyperactivating” strategies that overcompensate for feelings of rejection and dysregulated affect (Mikulincer et al., 2003). Less attachment-related anxiety could therefore account for the less overcompensating and hyperactive therapist behaviors that are indicated in theme B2. Avoidant attachment strategies regulate negative affect like hyperactive anxious strategies, but this is instead accomplished through deactivating strategies. Reductions in attachment avoidance could also account for what one participant described as a newfound ability to hold their own and push back on the patient when they invalidated the therapist. While secure attachment has been linked to greater emotional regulation, a relationship partly replicated by study 1, aspects of emotional regulation captured by the ERSQ may also be related to felt changes among the therapists in study 2. Increased emotional regulation skills could be related to a perceived shift towards a less verbal and more intuitive stance in theme B1. Some therapists noted how they make greater use of their own somatic affective cues to guide interventions, this area is concurrently covered by some of the ERSQ items.

In terms of the acute psychedelic experience, some of the therapist’s responses describe phenomena like those captured by the MEQ and the EBI. Therapists seemed to make use of the theoretical framework of defenses, anxiety and emotion captured by Malan’s conflict triangle in their stated attempts to deal with unconscious emotional conflicts during the psychedelic experience in theme A1. The theoretical device of Malan’s triangles could perhaps serve as a useful pedagogical and diagnostic tool for psychedelic-assisted therapy much like how it is used in ISTDP. This perspective may also be useful in theoretical developments on the concept of emotional breakthrough from psychedelics. However, therapist’s expectation or wish to experience the strong feelings of rage that are often emphasized within ISTDP did not come to fruition, yet they still experienced resolution of psychological conflicts. This prompted some to propose alterations to the ISTDP metapsychology that has a reduced emphasis on rage in theme A2. The spiritual or mystical nature of their experiences prompted some therapists to propose an expansion of ISTDP’s theory that could account for these phenomena. Finally, theme A3 provided some examples of how psychedelic experiences may illustrate certain potentially therapeutic processes that some therapists want to incorporate into their own practice. Overall, while psychedelic-induced changes in psychological functioning may be induced through processes like increased neuroplasticity, these experiences of therapists serve as examples of how the content of the experience itself also became a source of learning and change. This could be related to
the relationship between experience and outcome as exemplified by the predictive effects of emotional breakthrough on emotional regulation skills. Additionally, the results also offer novel examples of commonalities and differences between theoretical beliefs of how psychedelics act and the metapsychology of intensive short-term dynamic psychotherapy.

Previous studies on the effects of psychedelics have shown lasting alterations in a variety of psychological traits, abilities, beliefs, and functions. However, attachment and emotional regulation have not been well studied in this context. Only one study has investigated changes in attachment disposition, and the results of study 1 largely replicate their findings (Stauffer et al., 2020). However, I found reductions in both measures of attachment-related insecurity, while they only found reductions in anxiety. Additionally, they measured attachment at 3 months follow-up in contrast with 2 weeks in this study. These results offer further tentative support for the hypothesized potential for psychedelics to occasion positive changes in attachment style (Cherniak et al., 2022). While there is a growing evidence base of psilocybin influencing social and emotional processing, changes in emotional regulation skills from psilocybin have never been directly studied. One prior population-based survey showed a correlation between psychedelic use and greater emotional regulation skills (Thiessen et al., 2018). The findings of study 1 may serve as a preliminary indication of potential causality that could prompt further investigation.

While psychedelic therapists are offered opportunities of having personal supervised experiences with psychedelics in certain training programs, there is little research on consequences of these. This is especially true outside the field of psychedelic-assisted psychotherapy, where no such studies exist. The rationale behind using psychedelics in therapist training is usually ethical and practical, in that it will facilitate rapport through easier relating with patients in altered states of consciousness (Nielson & Guss, 2018). I have argued that psychedelics may target traits and abilities relevant for explaining therapist effects in non-psychedic psychotherapy modalities. The results of study 1 indicate that psilocybin consumed in a supervised, psychologically supportive environment may occasion increases in attachment security and emotional regulation skills. These factors could in turn serve to promote the successful establishment of a therapeutic alliance through increased capacity to handle strong emotions and form a realistic and appropriate relationship with the client. Study 2 offers several examples of how these changes may be perceived by clinically active ISTDP practitioners. These include experiences of being less burdened by previously problematic relationship dynamics in their therapies, as well as a subjectively increased access to certain somatic-affective countertransference cues. While direct inference between the two studies is not possible, these illustrative examples may serve as potentially clinically meaningful improvements of certain therapeutic processes and behaviors through increased relational and emotional functioning.

Limitations

There are several potential methodological issues with both studies. While the aim was to explore whether therapist effects might be positively affected by psilocybin, we did not directly measure or study variance in therapist outcomes. Study 1 did not feature a control group, and hence the results cannot serve as a clear indication of causality between psilocybin itself and observed changes in emotional regulation skills and attachment. These changes may be partially or wholly due to placebo, the psychological support and influence offered by the retreat facilitators and other group members, demand characteristics or social desirability. The short follow-up measure prevents any inference on the duration of any effects. While the aim of this essay is to examine changes in traits relevant for understanding therapist effects, few if any of the participants of study 1 were therapists. Hence, the external validity for study 1 is very low. The number of participants (n = 50) might be too small to allow for a reliable multiple linear regression. Additionally, study 1 did not compare non-therapists with the therapist group, since the low number of participants would not allow for meaningful statistical comparison. Hence, interpretation of these results rest on the assumption that adult attachment disposition and emotional regulation skills are equally distributed within the population of therapists as well as the population at large. The study only incorporated self-report measures, and while previously validated, these measures may not reliably capture the targeted theoretical constructs. More objective measurements such as the adult attachment interview (George et al., 1985) or observer rated measures of affect regulation in controlled settings may increase the reliability of measuring the relevant
theoretical constructs. Also, other potential traits, abilities and skills that may account for therapist effects than were implemented in study 1, such as personality.

The aims of study 2 were to examine and summarize the experiences of ISTDP therapists attending a psychedelic retreat to explore potential ways that their work and theoretical views might be impacted. Their experiences were recorded in essays that I thematically analyzed. While this material was quite information dense and did result in a few distinct themes, the texts themselves were quite short. Longer format texts or interviews might have allowed for a more exhaustive and genuine account of their experiences. The essay questions might not have allowed for inclusion of potentially relevant data. Also, some wordings in the essays were abstract or ambiguous which made them difficult to interpret. Many of these issues might have been relieved through an interview format which would have made follow-up questions and clarifications possible. There are some potential factors that may impact the quality or interpretability of the participant’s responses. A strongly positive experience of the retreat, as well as enthusiasm about potentially improving as therapists, could color their descriptions. Two participants mentioned that they had not immediately returned to work after retreat, leading to less opportunities to notice changes. One mentioned that it is difficult to attribute ideas or changes to the psychedelic experiences of the retreat as opposed to prior psychedelic experiences. Study 2 offers some novel insights into the relationship between ISTDP and psychedelics. However, the specificity of ISTDP theory could have colored how the participants interpreted the psychedelic experience and how they retold it in the study. Perhaps the findings might therefore only be applicable to ISTDP therapists and not relevant to other modalities. While qualitative research cannot be reliably generalized, this might be especially true for this approach.

Future directions

The question of how therapists and their work are affected by psychedelic experiences remains to be answered. Future quantitative studies should feature long follow-up measurements, use a control group, and feature a large sample of therapists. A wider range of more objective trait and ability should be employed to examine potential psychedelic-related effects, as well as measures comparing differences in their own therapeutic outcomes. Measures of additional traits, abilities, and skills such as interpersonal skills, emotional recognition capabilities, and empathy should also be included, given their role in influencing therapist effects. The continued investigation of these topics might be especially important for psychedelic therapists, among whom use of psychedelics is quite common but its effects are unknown. It is also important for future studies to examine potential negative effects of psychedelics and discern whether therapist psychedelic use might pose a risk for their patients. Apart from designing studies examining the effects of psychedelics on therapists, further studies of the effect of psychedelics on attachment and emotional regulation are warranted. If the results of study 1 can be corroborated by more robustly designed studies, they might have important indications for relevant processes responsible for the therapeutic effects of psychedelics given the importance of attachment and emotion regulation for relational and psychological health. This study did not directly assess therapist effects, future studies could compare the outcomes of therapists who have and have not used psychedelics and whether any differences could be accounted for by changes in working alliance or other therapeutic processes, that in turn could be accounted for by changes in relational or emotional functioning.

Study 2 showed how psychedelics might be related to certain subjective meaningful changes in the work of ISTDP practitioners. Just as some of the participants were informed by their psychedelic experience, their responses may inform psychedelic research in turn. Commonalities between the concepts of the inner healing intelligence in psychedelics and the unconscious therapeutic alliance in ISTDP may inform future research into these abstract constructs. Study 2 also illustrates ways that psychedelic-induced alterations of spiritual beliefs may in turn have consequence on the work of psychotherapists. This may warrant further study. Future psychedelic research might also use theoretical constructs like Malan’s triangles or Alexander’s emotionally corrective experience to explain effective processes of psychedelic-assisted therapy. While early psychedelic science was influenced by psychoanalysts like Freud and Jung to a large extent (e.g., Grof, 2008), it has not incorporated modern empirically based developments of psychodynamic theory from modalities like experiential dynamic psychotherapy. The common points indicated in this essay may encourage future psychedelic research to be informed by contemporary psychodynamic theory and practice.
Conclusion

This essay has investigated potential ways that psychedelics could impact psychological traits and processes that are relevant for the work of psychotherapists, drawing from quantitative and qualitative data. The results of study 1 indicate that psilocybin might impact a person’s attachment disposition and emotional regulation skills for the better, and that these changes might be predicted by specific phenomenological features of the psychedelic experience. Study 2 provides insight into how the acute and lasting effects of psilocybin are viewed through the eyes of ISTDP therapists. These therapists provided examples of novel theoretical intersections between ISTDP and psychedelics, as well as examples of subjectively felt clinically meaningful changes in their work following the retreat. While aspects of their responses could be related to factors like increased attachment security or emotional regulation skills, their experiences were varied and complex and cannot simply be reduced to these constructs. This may especially be the case for the several examples of insights of a spiritual, metaphysical, or metapsychological character. This essay may serve as an argument for the need of further research into the effects of psychedelics like psilocybin on psychotherapists and their therapeutic outcomes.

Ethics

The participants in the study had already voluntarily chosen to participate in Nysnö’s retreat program, recruitment of study participants only took place after the start of the program. Although psilocybin in “truffle” form is not illegal in the Netherlands and generally associated with a low risk profile for users, there are several possible risks for participants such as elevated blood pressure and strong experiences of discomfort (Johnson et al., 2008). The research participants are individuals who have voluntarily chosen to use these substances without our influence. We did not encourage anyone to participate in a retreat and we did not administer any substances. The study aims solely to investigate the participants' experiences of the psilocybin experience through surveys and open-ended questions, which should not pose any significant increased risk to the research participants. However, the questions in the surveys may evoke feelings as they touch upon memories of experiences that can be anxiety-provoking. We sought an advisory opinion from the Swedish Ethical Review Authority which confirmed that the study did not require an ethical review (Diary number 2022-03652-01). We did not perform any experimental intervention in the way stated in §4, or process personal data as stated in §3 of the Swedish Ethical Review Act (Etikprövningslagen, lag om etikprövning av forskning som avser människor, 2003).

All participants provide informed consent to participate in the study and that their results may be published anonymously in a scientific study. In cases where participants are asked to provide open-ended responses, they are also given the opportunity to give consent to be directly quoted in a thesis or report, which was not a requirement to participate in the study.
References


Barrett, F. S., Doss, M. K., Sepeda, N. D., Pekar, J. J., & Griffiths, R. R. (2020). Emotions and brain function are altered up to one month after a single high dose of psilocybin. *Scientific Reports, 10*(1). [https://doi.org/10.1038/s41598-020-59282-y](https://doi.org/10.1038/s41598-020-59282-y)


MAPS, Multidisciplinary Association for Psychedelic Studies (2023). *MAPS MDMA Therapy Training Program – About the program.* [https://mapsbcorp.com/training/about-the-program/](https://mapsbcorp.com/training/about-the-program/)


Appendix A: Emotional Regulation Skills Questionnaire (ERSQ-27; Grant et al., 2018)

<table>
<thead>
<tr>
<th>2. Dealing with emotions: In the last week ...</th>
<th>not at all</th>
<th>rarely</th>
<th>sometimes</th>
<th>often</th>
<th>almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) ... I was able to consciously pay attention to my feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>2.) ... I could consciously bring about positive feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>3.) ... I understood my emotional reactions.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>4.) ... I could endure my negative feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>5.) ... I was able to accept my negative feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>6.) ... I could have labelled my feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>7.) ... I had a clear physical perception of my feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>8.) ... I did what I wanted to do, even if I had to face negative feelings on the way.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>9.) ... I tried to reassure myself during distressing situations.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>10.) ... I was able to influence my negative feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>11.) ... I knew what my feelings meant.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>12.) ... I could focus on my negative emotions if necessary.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>13.) ... I knew what emotions I was feeling in the moment.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>14.) ... I consciously noticed when my body reacted towards emotionally charged situations in a particular way.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>15.) ... I tried to cheer myself up in emotionally distressing situations.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>16.) ... I did what I intended to do despite my negative feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>17.) ... I was OK with my feelings, even if they were negative.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>18.) ... I was certain that I would be able to tolerate even intense negative feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>19.) ... I was able to experience my feelings consciously.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>20.) ... I was aware of why I felt the way I felt.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>21.) ... I knew that I was able to influence my feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>22.) ... I pursued goals that were important to me, even if I thought that doing so would trigger or intensify negative feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>23.) ... I was able to experience my negative feelings without immediately trying to fight them off.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>24.) ... my physical sensations were a good indication of how I was feeling.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>25.) ... I was clear about what emotions I was experiencing.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>26.) ... I could tolerate my negative feelings.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
<tr>
<td>27.) ... I supported myself in emotionally distressing situations.</td>
<td>$O_5$</td>
<td>$O_1$</td>
<td>$O_2$</td>
<td>$O_3$</td>
<td>$O_4$</td>
</tr>
</tbody>
</table>
Appendix B: Experiences in Close Relationships Scale Short-form (ECR-12; Wei et al., 2007)

The following statements concern social behavior and how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Respond by circling the number that best describes your experience of each statement by using the following scale:

Strongly disagree 1 2 3 Neutral/mixed 4 5 6 Strongly agree 7

1. I feel comfortable depending on romantic partners.
2. I worry about being abandoned.
3. I feel comfortable sharing my private thoughts and feelings with my partner.
4. I worry that romantic partners won’t care about me as much as I care about them.
5. I tell my partner just about everything.
6. I worry a fair amount about losing my partner.
7. I usually discuss my problems and concerns with my partner.
8. I worry about being alone.
9. I don’t feel comfortable opening up to romantic partners.
10. I need a lot of reassurance that I am loved by my partner.
11. I don’t mind asking romantic partners for comfort, advice, or help.
12. If I can’t get my partner to show interest in me, I get upset or angry.

Reversed: 3(15), 5(25), 7(27), 9(29), 11(31)

Avoidance: odd, ecr full scale: 9,15,25,27,29,31

Anxiety: even, ecr full scale: 2,6,8,14,18,24
Appendix C: Emotional Breakthrough Inventory (EBI, Roseman et al., 2019).

vii) Please rate to what extent the following statements apply to your psychedelic session / ceremony experience by marking with an “X” a number between 0 and 100 on the scale below each statement. Note that zero corresponds to your normal waking consciousness, i.e. 0 = “No, not more than usually”, 100 = “Yes, I experienced this completely/entirely”.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>I faced emotionally difficult feelings that I usually push aside.</td>
<td>0-100</td>
</tr>
<tr>
<td>I experienced a resolution of a personal conflict/trauma.</td>
<td>0-100</td>
</tr>
<tr>
<td>I felt able to explore challenging emotions and memories.</td>
<td>0-100</td>
</tr>
<tr>
<td>I was resisting and avoiding challenging feelings throughout, without breakthrough.</td>
<td>0-100</td>
</tr>
<tr>
<td>I had an emotional breakthrough.</td>
<td>0-100</td>
</tr>
<tr>
<td>I was able to get a sense of closure on an emotional problem.</td>
<td>0-100</td>
</tr>
<tr>
<td>I felt emotionally stuck throughout, without breakthrough</td>
<td>0-100</td>
</tr>
<tr>
<td>I achieved an emotional release followed by a sense of relief.</td>
<td>0-100</td>
</tr>
</tbody>
</table>
Appendix D: Revised Mystical Experience Scale (MEQ-30, Barrett et al., 2015).

v) For each of the following, please rate the extent to which you agree with each statement. Looking back on the entirety of your session / ceremony experience, please rate the degree to which at any time you experienced the following phenomena. Answer each question according to your feelings, thoughts, and experiences at the time of the ceremony.

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Freedom from the limitations of your personal self and feeling a unity or bond with what was felt to be greater than your personal self.</td>
<td></td>
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<tr>
<td>Experience of pure being and pure awareness (beyond the world of sense impressions).</td>
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<tr>
<td>Experience of oneness in relation to an &quot;inner world&quot; within.</td>
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<tr>
<td>Experience of the fusion of your personal self into a larger whole.</td>
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<tr>
<td>Experience of unity with ultimate reality.</td>
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<tr>
<td>Feeling that you experienced eternity or infinity.</td>
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<tr>
<td>Experience of oneness or unity with objects and/or persons perceived in your surroundings.</td>
<td></td>
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<tr>
<td>Experience of the insight that &quot;all is One&quot;.</td>
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<tr>
<td>Awareness of the life or living presence in all things.</td>
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<tr>
<td>Gain of insightful knowledge experienced at an intuitive level.</td>
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<tr>
<td>Certainty of encounter with ultimately reality (in sense of being able to &quot;know&quot; and &quot;see&quot; what is really real at some point during your experience).</td>
<td></td>
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<tr>
<td>You are convinced now, as you look back on your experience, that in it you encountered ultimate reality (i.e. you &quot;knew&quot; and &quot;saw&quot; what was really real).</td>
<td></td>
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<tr>
<td>Sense of being at a spiritual height.</td>
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<tr>
<td>Sense of Reverence.</td>
<td></td>
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<tr>
<td>Feeling that you experienced something profoundly sacred and holy.</td>
<td></td>
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<tr>
<td>Experience of amazement.</td>
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<tr>
<td>Feelings of tenderness and gentleness.</td>
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<tr>
<td>Feelings of peace and tranquility.</td>
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<tr>
<td>Experience of ecstasy.</td>
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<tr>
<td>Sense of awe or awesomeness.</td>
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<tr>
<td>Feelings of joy.</td>
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<td></td>
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</tr>
<tr>
<td>Loss of your usual sense of time.</td>
<td></td>
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<tr>
<td>Loss of your usual sense of space.</td>
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</tr>
<tr>
<td>Loss of usual awareness of where you were.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sense of being &quot;outside of&quot; time, beyond past and future.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Being in a realm with no space boundaries.</td>
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</tr>
<tr>
<td>Experience of timelessness.</td>
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<tr>
<td>Sense that the experience cannot be described adequately in words.</td>
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</tr>
<tr>
<td>Feeling that you could not do justice to your experience by describing it in words.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Feeling that it would be difficult to communicate your own experience to others who have not had similar experiences.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>