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Psilocybin & the Postpartum Window

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Phenomenological Parallels: Matrescence and Psilocybin

In many ways, matrescence parallels the states of consciousness induced by psychedelics. Both are liminal experiences of a threshold state between former and emergent identities. Each is marked by intense vulnerability and holds the potential for lasting psychological and neurological reorganization (Athan, 2024; Davis et al., 2021; Ly et al., 2018; Nayak et al., 2023; Orchard et al., 2023). In these transitional states the external world is often perceived in new and disorienting ways; individuals may experience a cascade of novel, potentially overwhelming, sensory, emotional, and cognitive shifts (Preller & Vollenweider, 2018; Carhart-Harris & Friston, 2019). This paralleled phenomenology invites careful investigation into how psilocybin may uniquely support the formative relationship of the mother-infant dyad.

While these mental states arise from vastly different origins—one from the biological cascade of childbirth and motherhood (Orchard et al., 2023; Pawluski et al., 2022), the other from a neurotropic intervention (that transiently heightens neural plasticity) (Ly et al. 2018; Vargas et al., 2023)—their phenomenological and neurobiological parallels offer distinctive insights into understanding matrescence as a naturally occurring altered state of consciousness (Vollenweider & Kometer 2010; Carhart-Harris & Friston, 2019; Ziff et al., 2022). Psychedelic states and postpartum transitions converge on a shared experiential arc that facilitates identity transformation: vulnerable exposure and de-centering, an intensified phase of expansion and deepening, and a subsequent integration that recenters the self in a new configuration.

These parallels provide a rationale for the MINDS framework which looks to the shared features of matrescence and psychedelic states to inform targeted neurobiological interventions. Psilocybin could, in principle, serve as a biological and experiential support for mothers whose environments do not reliably afford the emotional, relational, and reflective conditions for these features to occur. Thoughtfully designing therapeutic interventions that leverage this critical window and may prove uniquely beneficial to mothers.

Exposure

Both matrescence and psychedelic experiences involve a vulnerable de-centering whereby familiar, often long established, identity structures are dismantled. This initial exposure—the disintegration of what once felt integrated and stable—creates conditions by which new forms of being can arise. The phenomenology of self-deconstruction can be mapped across three distinct, interlocking dimensions: unselfing, ego dissolution, and the collapse of linear time. Together they loosen the rigid, autobiographical narrative, disrupt habitual patterns of consciousness, and make way for an updated self to emerge. This period of psychological

vulnerability is arguably a necessary precursor to adaptive, sustainable personal transformation (Athan, 2013, 2024; Carbonaro et al., 2016; Davis et al., 2021; Griffiths et al., 2016; Mercer, 1985; Orchard et al., 2023; Roseman et al., 2019).

Unselfing

The concept of unselfing, borrowed from Iris Murdoch, a 20th century moral philosopher, captures this decentering with particular elegance. It names a process in which the self's usual centrality recedes into the background and attention is directed beyond one's own concerns (Murdoch, 1970). Murdoch described unselfing as the moments in which the "fat, relentless ego" is suppressed and egocentric salience reduced. This occurrence increases one's capacity to attend to reality and to become genuinely concerned with what is non-self. According to Murdoch, escaping the trap of self-centred preoccupation, and its accompanying psychological isolation, is a prerequisite for love, because only a less-occupied self can truly see and respond to others.

In matrescence, unselfing tends to manifest as a radical reorientation of love and attention, in which one's own needs, desires, and concerns shift toward those of the infant (Athan, 2013; Mercer, 1985; Trinko et al., 2025). Mothers describe becoming deeply in tune with their baby's emotional states, cues, and needs—often at the expense of their own interoceptive awareness (Athan, 2013; Mercer, 1985; Orchard et al., 2023; Stern, 1995). The question "what do I want?" gives way to "what does my baby need?" (Stern, 1995). Neuroimaging research supports this phenomenology: fMRI studies find increased activity in empathy networks, and decreased activity in self-referential regions, when mothers view their infants (Hoekzema et al., 2017; Kim et al., 2016). This attentional shift gives rise to the mental conditions necessary for the moment-to-moment responsiveness of a secure mother-baby dyad.

During psilocybin experiences, unselfing is, similarly, reported as a shift of attention (Kähönen, 2023; Pollan, 2018). As the usual self-referential processing quiets, focus moves away from personal narratives, anxieties, and the "me-first" chatter of the ego (Kähönen, 2023). Constant internal commentary about how events relate to oneself subsides and the intrinsic qualities of the external world become more compelling —the complexity of a leaf, the humanity of another person, or the interconnectedness of existence (McCulloch et al., 2022; Metastasio et al., 2025; Pollan, 2018). Psychedelic studies indicate that this feature is therapeutically distinct: the degree to which one experiences unselfing or "self-transcendence"—captured in measures of mystical-type experience—during the session is a beneficial aspect that reliably predicts lasting improvements in depression, anxiety, and overall well-being (Brudner et al., 2025; Ko et al., 2022; Letheby, 2021).

In both states, unselfing serves as an adaptive feature. It allows attention and care to be directed outward—toward others, toward interconnection, toward dimensions of meaning and purpose that transcend individual concerns. This temporary dissolution of rigid self-centeredness creates space for experiences of connection, compassion, and meaning that can be integrated into a more relational, dyad-oriented sense of self over the course of both matrescent and psychedelic transformation.

Ego Dissolution

Closely related to unselfing is the phenomenon of ego dissolution. Here, ego refers to the self-protective, narrative organization of experience that keeps ‘me’ at the center: it defends preferred stories about who “I” am, and projects these stories into the past and future. By contrast, “self” denotes the broader subject of experience: the living person who can relate to others, reflect, and change over time. Ego dissolution is a temporary reduction or complete loss of the sense of self as a distinct, stable, and continuous entity (Nour et al., 2016). During this state, individuals may be less invested in maintaining and defending a cohesive identity. Tightly held labels, roles, and self-definitions that once felt essential may loosen or disappear entirely—a hallmark of both matrescent and psychedelic experiences.

The transition to motherhood requires a fundamental reorganization of self-concept from I to we—from autonomous individual to member of an interdependent dyad (Athan, 2024). To make this transition, women must weave together past and present identities to integrate the new role of caregiver (Mercer, 1985). Many mothers describe feeling that their former identity has dissolved into the demands of caregiving (Hwang et al., 2022; Williamson et al., 2023), a process colloquially referred to as "maternal ego death" (Citro, 2025; Geddes, 2025; Hobson, 2024; Martin, 2023). When life is organized around the infant’s need, the rigid, biographical self-narrative of the ego often falls away; there is neither the time nor cognitive bandwidth to sustain the stories that previously defined "who I am" (Hwang et al., 2022; Williamson et al., 2023). Narrative identity theory conceptualizes that rewriting one’s personal story is a central mechanism of adaptation and mental health, which underscores why this narrative reorganization is so relevant to matrescence (McAdams & McLean, 2013). While potentially disorienting, ego dissolution can enable more responsive caregiving and help scaffold a secure attachment with her baby (Feldman, 2017).

Similarly, psilocybin-induced ego dissolution is characterized by a disruption to the once stable autobiographical story that unites one's past, present, and imagined future (Millière et al., 2018; Nour et al., 2016). Individuals report that familiar storylines, labels, and identities feel less central or even irrelevant, and this loosening is often described as freeing or liberating (Buchborn et al., 2023; Griffiths et al., 2008). In this space the usual defensive organization of the

self is temporarily suspended which creates conditions for profound insight and relational restructuring of the narrative self and its relational priorities (Griffiths et al., 2006; Griffiths et al., 2008).

In both contexts, ego dissolution can be experienced as frightening, liberating, or both. When adequately supported, it can facilitate growth, connection, and psychological flexibility (Athan, 2013; Griffiths et al., 2006). When unsupported, it may amplify distress, fragmentation, and difficulty integrating the experience into a coherent sense of self (Orchard et al., 2023; Roseman et al., 2019).

Temporal Distortion

Disrupted perception of time characterizes both matrescence and psychedelic experiences. The dissolution of the narrative self precipitates the collapse of the linear temporal framework that typically organizes conscious life (Jiang et al., 2025; Letheby & Gerrans, 2017). Because the ego is the primary architect of personal history and imagined future, when this structure dissolves, the sequential timeline of "past, present, future" loses coherence (Rutt & Löckenhoff, 2016). In both states, time becomes fluid, distorted, or altogether meaningless and shifts the individual from a chronological mode of existence into an all-consuming present moment.

New mothers frequently describe the postpartum time as paradoxical: simultaneously suspended and accelerated (Finlayson et al., 2020; Olza et al., 2018). In the "fourth trimester fog" sleepless nights can feel never-ending while months vanish “in the blink of an eye.” In this phase, the linear progression of clock time gives way to the cyclical rhythms and immediate needs of the infant, further reinforcing a present-moment, dyad-centered mode of awareness (Feldman, 2007; Thomas et al., 2014).

Psychedelic research likewise documents profound temporal distortions (Jiang et al., 2025; Wittmann et al., 2007). Individuals report time dilation, where brief moments feel infinite; time compression, where hours pass like minutes; and perhaps most strikingly, complete timelessness—experiences in which past, present, and future seem unified, nonexistent, or irrelevant (Jiang et al., 2025). These temporal shifts reshape where attention and meaning settle; when time stretches, collapses, or disappears, what comes into focus can permanently reorder one’s priorities, values, and relationships.

This parallel suggests that our ordinary sense of linear time is intimately tied to maintaining a bounded, autobiographical self (Letheby & Gerrans, 2017). When that self loosens, time itself transforms. The collapse of a rigid time structure may serve adaptive functions in both contexts: by untethering oneself from the obligations of the future and the past, it is possible to more fully inhabit the present moment; where caregiving, insight, and bonding actually occur. These

temporal alterations may be integral to personal transformation and to the depth of connection with the mother-baby dyad.

Expansion

As the familiar internal structures are dismantled, the external world intensifies. What was previously relegated to the background moves sharply into the foreground and takes on new significance, immediacy, and attention. In both matrescence and psilocybin states, this intensified encounter with the world unfolds across five experiential domains: heightened perception, emotional intensity, amplified connectedness, awe, and existential inquiry. Together these dimensions deepen contact with reality in ways that reorganize one's understanding of self, the world, and meaning.

Perception

Perception is the process of becoming aware of and interpreting sensory information—what we see, hear, smell, taste, and feel, and how we make meaning out of it. Beyond raw sensation, perception is the way the brain selects and organizes information, so the world feels coherent and meaningful (Goldstein, 2019). In both matrescence and psychedelic states, perception is heightened and world takes on a new intensity: colors feel more saturated,

sounds more distinct, and tactile and olfactory cues more captivating (Bayne & Carter, 2018; Lagarrigue et al., 2025). Familiar stimuli appear vivid, textured, emotionally charged and are encountered with an immediacy that can produce a sense of "seeing for the first time."

Mothers often describe this heightened perceptual salience as task-specific and organized around the infant (Kim et al., 2016). A particular cry becomes immediately recognizable, micro-shift in facial expressions stand out, and tiny bodily cues communicate needs (Piallini et al., 2015). The heightened perceptual acuity and recalibration support bonding by making infant-related stimuli more detectable and more intrinsically rewarding (Kim et al., 2016; Kim & Strathearn, 2016).

Under psilocybin, individuals commonly report intensified visual details, richer colors and patterns, novel textual depth, and, at times, synesthetic blending of senses (Kometer & Vollenweider, 2016; Stoliker et al., 2025). This sensory landscape is often described as overwhelmingly intense yet appraised as positively transformative rather than negatively overwhelming or distressing (Carbonaro et al., 2016; Ko et al., 2022; Metastasio et al., 2025). In this context, heightened perception is a distinct phenomenological feature in which the world seems to gain new resolution and depth (Bayne & Carter, 2018; Kometer & Vollenweider, 2016; Stoliker et al., 2025).

In both experiences, formerly mundane aspects of the world become sources of fascination and meaning. Heightened perception can support psychological insight by revealing new qualities, interrupting automatic ways of seeing, and creating space for flexible interpretations (Bayne & Carter, 2018; Kim, 2016). These shared perceptual enhancements suggest there may be overlapping mechanisms (Barba-Müller et al., 2018; Ly et al., 2018). As constraining neural patterns loosen, it opens opportunities for insight, reorientation, and transformation.

Emotion

Emotional intensity is a shared hallmark of matrescence and psilocybin states, marked by amplified, often clarified feelings that can be exquisitely meaningful as well as destabilizing (Carbonaro et al., 2016; Finlayson et al., 2020). When cognitive defenses and everyday distractions subside emotions can be more felt directly; they become harder to ignore and act as a central point for organizing and responding to one's reality (Athan, 2013; Griffiths et al., 2006). High intensity emotional states can scaffold adaptive bonding, or in the absence of support, tip into dysregulation or clinical distress (Ko et al., 2022; Slomian et al., 2019).

For new mothers, hormonal shifts, sleep disruption, and the existential weight of caring for a fragile new life can converge in ways that magnify emotions: joy can feel transcendent, anxiety piercing, and sadness or grief unexpectedly dark (Finlayson et al., 2020; Moos et al., 2026; Schiller et al., 2015). This affective permeability can deepen bonding, empathy, and vigilance to more precisely understand her baby's signals and needs (Feldman, 2007). In the broader arc of matrescence, such emotional intensity becomes one of the forces through which a maternal identity is integrated by adjusting priorities and values around the emotional life of the dyad (Athan, 2013, 2024; Feldman, 2017).

Psilocybin experiences similarly open the emotional aperture, allowing individuals access to a broader, more nuanced range of feeling across the full spectrum of human emotion (Davis et al., 2021; Griffiths et al., 2006, 2016). Individuals frequently describe waves of overwhelming love, gratitude, and compassion, alongside encounters with grief, fear, shame, or existential terror; in some instances, these emotions were not fully accessible before, having been numbed or avoided (Griffiths et al., 2006, 2016; Liebnau et al., 2025). The quality of these emotions shift as well and they are reported as "pure" or "undiluted," less entangled with defensive narratives or self-justification, such that one can feel sadness simply as sadness, or love as a direct, embodied force (Liebnau et al., 2025). Notably, even difficult emotional experiences during psychedelic sessions are frequently described retrospectively as meaningful and valuable and contribute to lasting therapeutic benefits (Carbonaro et al., 2016; Griffiths et al., 2006, 2016; Ko et al., 2022).

During matrescence and psilocybin experiences, emotional intensification serves vital adaptive functions. When emotions are fully accessible, they can be felt, processed, integrated into a

coherent sense of self. As feelings are fully accepted, they often clarify what truly matters and can realign values, commitments, and everyday behavior.

Empathy

Enhanced empathy can be framed as an increased capacity to feel with, for, and as another. It reflects a qualitative deepening of attunement in which others' needs, vulnerabilities, and perspectives become more salient, compelling, and difficult to ignore (Feldman, 2017). Empathic resonance reorganizes social perception: the other is no longer an object in the environment but a subject whose experience exerts a powerful gravitational pull on one's own attention, meaning-making, and behavior.

In matrescence, enhanced empathy is primarily directed toward the infant (Bak et al., 2021). Mothers describe increased sensitivity to their baby's emotional states, from automatic bodily responses to crying to more explicit, reflective efforts to understand what the baby is feeling and needing (emotional and cognitive empathy)(Kurth et al., 2014). Beyond the infant, many mothers report expanded compassion for their own mothers, a deeper awareness of human vulnerability, and increased interest in nurturing relationships across multiple domains (Athan, 2013; Trinko et al., 2025). An increased capacity for connection across relationships reflects a broader matrescent shift towards a more relational, connection-centered sense of self (Athan, 2013, 2024).

Enhanced empathy and emotional openness are also well-documented effects of psychedelic experiences (Bhatt & Weissman, 2024; Pokorny et al., 2017). Individuals report increased capacity for perspective-taking, compassion for themselves and others, and deeper emotional connections with the world around them (Bhatt & Weissman, 2024; Mason et al., 2019; Pokorny et al., 2017). These changes often persist beyond the session and are associated with sustained improvements that positively impact relationship quality (Mason et al., 2019; Weiss et al., 2021). This empathic expansion frequently extends across many domains: people feel profound connection to other beings, heightened resonance with the suffering and joy of humans, plants, and animals alike, and a thinning of the usual psychological barriers that keep empathy at a comfortable distance (Griffiths et al., 2006, 2016; Yaden & Griffiths, 2021).

In each case, empathy becomes a mechanism through which relationships expand, values shift toward connection, and the sense of self reorganizes around an experience of relational unity.

Awe

Awe is a complex, often overlooked, emotion that arises in response to an experience so vast it exceeds existing mental frameworks and requires cognitive accommodation (Keltner & Haidt,

2003). It is typically elicited when an experience challenges one's understanding of the world so profoundly that it generates the need to update and revise mental models in order to make sense of what has occurred (Gocłowska et al., 2023; Keltner & Haidt, 2003). Phenomenologically, awe is marked by a reduction in self-focus, a release from everyday preoccupations, and a shift in attention from personal concerns toward broader relational and collective aspects of existence (Bai et al., 2017). Awe functions as a gateway to deep psychological reorientation and potential for lasting change of mind.

For mothers, the birth process itself can be awe-inspiring (Dahan, 2023; Olza et al., 2018); to witness new life emerge is to confront the vastness of creation and one's own generative power. Women sometimes report mystical-like experiences during labor, for example a sense of oneness with the universe or closeness with all mothers (Olza et al., 2018). Beyond birth, the early postpartum period continues to offer micro-awe moments—daily encounters with wonder in the tiny perfection of an infant's expressions, the miracle of their existence, the vastness contained in an infant's gaze. Emerging research on parental awe suggests that such moments of being awestruck by one's child are associated with greater meaning in life, stronger parent–child bonds, and broader, more holistic gains in well-being (Chee et al., 2025).

Psychedelic-occasioned experiences often leave individuals awestruck by a sense of the sacred or numinous, feelings of unity with nature or the cosmos, and recognition of the profound interconnectedness of all things (Griffiths et al., 2006, 2016; Yaden & Griffiths, 2021). Awe is a particularly powerful component of psilocybin-occasioned mystical-type experience (Griffiths et al., 2011; Yaden et al., 2019; Yaden & Griffiths, 2021). It is consistently identified across clinical and naturalistic studies as a robust predictor of long-term therapeutic benefits and as a plausible affective mechanism through which these experiences enhance psychological flexibility and support enduring psychological transformation (Graziosi et al., 2024; Griffiths et al., 2011; James et al., 2020; Yaden & Griffiths, 2021).

In matrescence and psilocybin-occasioned states awe serves transformative functions: it widens perspective beyond the self, connects individuals to something larger, promotes values of care and connection, and facilitates cognitive reorganization. The awe-driven shift in perspective appears to be one route through which caregiving, priorities, and identity are reliably reorganized.

Existential Inquiry

In the context of matrescence and psilocybin, existential inquiry refers to the intensified, often unavoidable process of questioning. It involves actively engaging with unknowns about existence, mortality, meaning, mystery, and relational embeddedness that arise when familiar self-structures dissolve and ordinary frameworks for understanding life no longer feel sufficient.

This reckoning with fundamental curiosities becomes a central channel through which identity, values, and relationships are reorganized.

During matrescence, existential inquiry emerges as pregnancy, birth, and early caregiving repeatedly exposes mothers to the fragility and preciousness of life (Athan, 2024; Moos et al., 2026; Prinds et al., 2014). This confrontation brings questions of purpose, legacy, and relational embeddedness into the foreground. It can manifest as death or health anxiety, intrusive thoughts, heightened vigilance, but also as a sense of awe at the miracle of creating and sustaining life(Athan, 2024; Prinds et al., 2014). In Athan's (2013) qualitative study, mothers describe caring for a child as awakening to questions about purpose, interconnection, and transcendence—dimensions of meaning making that situate matrescence, and the accompanying existential upheaval, as a normative developmental transition.

Psychedelic experiences likewise often involve a direct encounter with the reality of death, the vastness of existence, and the impermanence of all things (Barrett & Griffiths, 2017; Klučková et al., 2025; Metastasio et al., 2025). Rather than being solely overwhelming and frightening, these confrontations can paradoxically reduce existential anxiety and increase appreciation for life (Barrett et al., 2016). Moments of connection to something beyond the individual self reliably predict lasting increases in prosocial behavior, life meaning, and spiritual well-being (Griffiths et al., 2011; McCulloch et al., 2022).

Rather than introducing a wholly new kind of phenomenon, existential inquiry appears to deepen the sense of purpose, strengthen feelings of connection, and reduce preoccupation with trivial concerns. In this sense, existential confrontation is a core feature through which values are clarified, priorities reordered, and a more authentic relationship to self, others, and the larger web of life can emerge.

Integration

Following the dissolution of familiar self-structures (exposure) and intensification of internal and external experiences (expansion), both matrescence and psilocybin states enter a phase of integration—a reorganization of how individuals understand themselves, what they value, how they relate to others, and how they think and respond. This integration phase is an opportunity for durable, adaptive features: updated identity, redefined values, a sense of unity, and psychological flexibility persist long after the acute experience.

Identity

Through the experiences of matrescence and psilocybin, the central psychological task is to integrate new roles, capacities, worldviews, etc., into a coherent sense of self. Where unselfing

loosens an ego-centric organization of experience, this phase involves re-centering the self around new relationships and responsibilities (Athan, 2024; Devenot et al., 2022; Metastasio et al., 2025; Stern, 1998). Adaptive identity integration is associated with higher psychological well-being, more satisfying relationships, and greater overall quality of life (McAdams & McLean, 2013). An updated identity is the mechanism through which both the mother and the participant actually live differently on the other side of the transition.

Matrescence involves integrating multiple, sometimes contradictory, self-representations: woman and mother, autonomous individual and dyad member, competent professional and novice caregiver, sexually desiring partner and lactating nurturer (Williamson et al., 2023). The narrative of who she is, what she values, how she relates to the world, as well as prior commitments, aspirations, and relationships are all re-evaluated in light of the infant's arrival (Hwang et al., 2022). When these multiple self-representations are woven into a cohesive matrescent identity, women are more likely to feel grounded, competent, and agentic in the maternal role, rather than lost, diminished, or split between incompatible versions of themselves (Athan, 2024).

Psilocybin experiences similarly precipitate profound identity reconstruction (Devenot et al., 2022; Letheby & Gerrans, 2017; Metastasio et al., 2025). The psychedelic experience can expose the constructed nature of identity, revealing that the self is not a fixed entity but a dynamic process (Lebedev et al., 2015; Metastasio et al., 2025). Many people describe an integration of previously disowned or suppressed aspects of themselves or discovering capacities and sensitivities they had not recognized before (Agin-Liebes et al., 2024; Devenot et al., 2022; Metastasio et al., 2025). Common identity shifts can include moving from a sense that "I am separate and alone" to "I am connected to everything;" or "I am what I achieve" to "I am worthy of love and belonging." Research shows these identity transformations can persist for months to years following a single psychedelic experience and positively alter life trajectories, career paths, relationship patterns, and overall sense of meaning and purpose (Griffiths et al., 2006; McCulloch et al., 2022; Roseby et al., 2025).

The lasting nature of these identity shifts suggests they represent genuine psychological reorganization rather than temporary states. This reorganized identity becomes the template for overall well-being, and in the case of matresence, for the functioning of the mother–baby dyad.

Redefined Values

Across both matrescence and psilocybin experiences, people describe a reconfiguration of their orienting commitments— often the criteria by which they judge what matters, how to live, and what futures are worth pursuing (Argyri et al., 2026; Kähönen, 2023; Orchard et al., 2023). Where

earlier ego dissolution exposed the limits of prior, ego-centric priorities, this phase involves integrating those insights into a new value structure.

Women navigating matresence consistently report that their priorities, values, and sense of importance shift dramatically when they become a mother (Athan, 2024; Hwang et al., 2022; Williamson et al., 2023). Goals that once organized their lives—career advancement, material status, social recognition—are less compelling when placed next to being present for their child (Athan, 2024; Torres et al., 2024). Many mothers describe a growing preference for simplicity, presence, and connection over achievement, status, or accumulation (Williamson et al., 2023). Tolerance for superficial social interactions or obligations that don't serve the family may decrease and energy for social issues—particularly those affecting children, families, and vulnerable populations—may increase (Schmidt et al., 2023; Williamson et al., 2023). With a heightened sense of responsibility to future generations, and to the condition of the world their child will inherit, mothers reevaluate what genuinely merits time and attention.

Psilocybin participants describe a parallel realignment of values. Many recount a shift away from status-focused or ego-driven values, and toward connection, authenticity, presence, creative expression, and contribution to others' well-being (Kähönen, 2023; Weiss et al., 2021). The experience often clarifies what has been valuable all along but obscured by habitual patterns of life: activities that once felt central may seem less urgent or even hollow (Argyri et al., 2026; Metastasio et al., 2025). People often speak of a renewed or first-time appreciation for nature and a desire to live in ways that are less harmful to others and the planet (Argyri et al., 2026; Forstmann & Sagioglou, 2025; Kettner et al., 2019). Research indicates that these value shifts can persist for months or longer and are associated with higher well-being, improved sense of meaning in life, and increases in empathy, nature relatedness, and prosocial attitudes and behavior (Agin-Liebes et al., 2020; Griffiths et al., 2011).

Phenomenological reports suggest that both matrescence and psilocybin experiences can function as turning points in how individuals understand “what matters most.” Rather than adding new commitments, value hierarchies are restructured to prioritize relationship, integrity, care, and meaning. This reordering has concrete consequences: it affects everyday decision making in ways that appear to sustain durable improvements in wellbeing and relationship quality.

Unity

A common experiential feature of both psychedelic states and matrescence is the thinning of interpersonal boundaries. In both contexts, “unity” refers to moments when the self is no longer felt as a sealed, solitary unit, but as continuous with another person or a wider field of life—when the mother–baby dyad feels like a single intuitive organism, or the boundary

between “me” and “others” dissolves (Kähönen, 2023; Maister et al., 2020). This emerging sense of unity can also be read as the felt counterpart of earlier temporal distortion: as time becomes less strictly linear and future-focused, it becomes easier to experience self, others, and the world as facets of a single, interconnected whole.

In matrescence, many mothers report feeling as if they and their baby are a single responsive unit: the baby’s internal state registers as a shift in the mother’s own bodily and emotional state (Aureli et al., 2022; Feldman, 2017). Everyday rhythms begin to feel co-regulated, as if the dyad shares one continuous experience rather than two separate entities. Empirical work on mother–infant synchrony echoes these reports, showing tightly coordinated patterns of physiology and behavior—such as heart rhythms that rise and fall together within seconds, and moments of mutual gaze, affect, and vocalization that cluster in time (Feldman, 2007, 2015, 2017). For mothers these dynamics are most often registered as an intimate sense of “we” in which their own wellbeing and their babies are felt to be inseparable (MacGregor, 2019; Montirosso & McGlone, 2020). This lived sense of shared experience is not incidental; it forms part of the subjective groundwork for caregiving, making the infant’s needs feel intrinsically compelling rather than merely external demands (Aureli et al., 2022; Numan & Young, 2016).

Psychedelic experience reports similarly describe a broadened sense of connection and an erosion of the usual barrier between self and other (Ko et al., 2022; Letheby & Gerrans, 2017). Participants often speak of a deep, immediate bond with the people around them, an intuitive sense of the interconnectedness of all beings, or a temporary disappearance of any clear line separating “me” from the rest of life. Intense feelings of unity and interconnectedness have been found to predict longer-term increases in social connectedness, empathy, and prosocial attitudes, indicating that even brief reductions in felt separateness can durably alter how people relate to others (Ko et al., 2022; McCulloch et al., 2022).

Both states can be understood in terms of self–other overlap. This overlap appears to make the needs and perspectives of others more emotionally compelling, which in turn supports more empathic, cooperative, and care-oriented behaviors. Matrescence and psilocybin experiences may each function as opportunities for a change in perspective that makes connection and oneness natural, organizing principals for a good life.

Fragmentation

When the exposure and expansion phases lack support the same heightened openness that makes matrescence and psilocybin experiences transformative can become a liability. In these conditions, one may not have the available internal and external resources to integrate and the process may, instead, result in fragmentation. Fragmentation may feel like confusion, instability, or incoherence. When this state persists, it can undermine basic functioning, strain

relationships, and increase vulnerability to depression, anxiety, or trauma-related symptoms, rather than allowing the transition to consolidate adaptively (Athan, 2024; Elfrink & Bergin, 2025).

Psychological Flexibility

In the integration phase, both matrescence and psilocybin experiences are associated with enduring psychological flexibility (Monteiro et al., 2019; Rutschmann et al., 2024; Sloshower et al., 2024). Psychological flexibility is the ability to remain in the present-moment and adjust behavior to fit the situation, rather than automatically repeating past patterns (Kashdan & Rottenberg, 2010). It manifests as flexible problem-solving, greater creativity, and willingness to revise previously rigid patterns of thought and behavior.

Mothering demands continuous creative problem-solving and adaptive ingenuity. Mothers must constantly improvise to meet their infant's changing needs, interpret ambiguous cues, and acquire new skills under conditions of sleep disruption, identity change, and heightened responsibility. Despite novice status in the maternal role, many new mothers report increased confidence and greater cognitive flexibility (ability to multitask, switch between tasks, improvise successful strategies in real time) by the end of the first year (Albanese et al., 2020; Perez et al., 2025; Sæther et al., 2023). This may contribute to enduring, adaptive changes in executive functioning with lasting benefits in planning, cognitive flexibility, and emotion regulation across adulthood (Ghadimi & McCormack, 2025; Orchard et al., 2023).

Psilocybin experiences have also been linked to psychological flexibility that persists beyond the acute drug state (Davis et al., 2020; Sloshower et al., 2024). Participants commonly report periods of spontaneous insight during sessions, followed by a period in which they generate more novel, creative ideas and explore alternative perspectives to challenges (Kugel et al., 2025; Metastasio et al., 2025). Clinically, psychological flexibility manifests as a willingness to interrupt maladaptive habits in behavior and interpersonal relationships (Neuhaus & Slavich, 2022). Psychological flexibility is increasingly framed as a core mechanism of change through which diverse interventions, including psilocybin-assisted therapy, exert their effects (Rutschmann et al., 2024; Sloshower et al., 2024). In this context, cognitive flexibility functions as a higher-order capacity that widens the behavioral and imaginative repertoire available for responding to future challenges.

Psychological flexibility can be understood as a downstream expression of the broader cognitive reorganization that occurs in matrescence and psilocybin occasioned states. Each opens a transient window in which rigid assumptions and habitual modes can be reconsidered and revised. In this way, both processes function as opportunities to mentally reorganize one's life, around an emerging identity and clarified values and to meet future challenges with greater

creativity and problem-solving capacities.

Role of Set & Setting

Set and setting is a concept from psychedelic research that describes how context largely influences altered-state experiences (Hartogsohn, 2017). Set refers to the person's inner state—mood, expectations, intentions, personality, and mental health history; setting refers to the physical, social, and cultural environment in which the experience occurs, including the people present and the degree of safety and support. Careful attention to set and setting is regarded as a central component to minimize adverse reactions and facilitate integration.

The matrescent set comprises a mother's expectations and beliefs about motherhood, her previous experiences with attachment, mental health history, perceived preparedness for the transition to parenting, etc. (Athan, 2024; Dahan, 2023). The matrescent setting encompasses partner and family support, financial and housing security, access to responsive healthcare, workplace policies, and broader cultural attitudes toward motherhood and maternal mental health (Thai, 2024). When these internal and external conditions are unfavorable—such as in the context of prior trauma, low partner support, financial strain, or stigmatizing cultural narratives—matrescence may function as a period of heightened vulnerability rather than as an adaptive developmental period.

The psychedelic set comprises an individual's expectations and beliefs about the session, their intentions, personality traits, prior experiences with altered states, trauma and mental health history, and current motivational context (Carhart-Harris & Goodwin, 2017; Hartogsohn, 2017). The psychedelic setting encompasses the physical environment, the presence and qualities of friends, guides, or therapists, interpersonal support during and after the session, and the broader cultural and institutional frame that shapes how the experience is interpreted (Hartogsohn, 2017; Johnson et al., 2008). When these internal and external conditions are unfavorable—such as in the context of unresolved trauma, unsafe or chaotic environments, lack of trained support, or pathologizing cultural narratives—psilocybin sessions are more likely to involve acute distress. Under these conditions they can increase vulnerability to fragmentation and clinical deterioration rather than support adaptive therapeutic change (Johnson et al., 2008).

From Parallels to Practice: The MINDS Proposal

Thus, the parallels between matrescence and psychedelic science are instructive: in both domains, vulnerability and adaptive potential are not properties of the individual alone, but are co-produced by set and setting. In this view, the postpartum period represents a theoretically

potent window in which therapeutic psilocybin intervention might support maternal identity integration and the mother–baby dyad. Through the considered use of psilocybin for its capacity to open a transient window of heightened exposure, expansion, and integration it could help mothers make sense of their new identity, feel confident in their care giving abilities, and deepen the bond with their baby.

These phenomenological parallels between psychedelic sessions and matrescence—and the possible shared plasticity-related mechanisms—invite a reframing matrescence as a neurobiological process. Within the MINDS framework, conceptualizing matrescence as a neurobiological state that is phenomenologically analogous to psychedelic experiences, yet uniquely dyadic, sharpens its clinical significance. Postpartum psilocybin interventions as a targeted means to harness this window of plasticity deliberately aim to support maternal identity integration, dyadic bonding, and long-term developmental trajectories.

Psilocybin Pharmacology

Psilocybin's therapeutic potential rests on a distinctive pharmacological profile that combines relatively predictable pharmacokinetics with powerful, network-level effects on the brain. Examining its absorption, distribution, metabolism, and elimination, as well as typical dosing parameters and safety margins, helps clarify which pharmacological features are most relevant for clinical application and how they can be leveraged for therapeutic design.

These pharmacokinetic and pharmacodynamic features inform how a single, time-limited exposure can lead to enduring changes in mood, cognition, and self-experience. They also provide the mechanistic foundation which situate psilocybin's actions within the neuroendocrine cascades, large-scale network plasticity, and experiential transformations that characterize matrescence and the developing mother–infant dyad.

Definition

Psilocybin is a naturally occurring indoleamine tryptamine alkaloid present in over 200 species of basidiomycete fungi, most prominently within the Psilocybe genus (Heal et al., 2018). Structurally, it is 4-phosphoryloxy-N,N-dimethyltryptamine, a tryptophan-derived compound whose phosphate group makes it water-soluble and amenable to oral administration (Van Court et al., 2022).

Classification

Within contemporary neuroscience and psychiatry, psilocybin is classified as a classic serotonergic psychedelic (Aboharb et al., 2025). Pharmacologically, it functions as a prodrug: after ingestion, psilocybin is dephosphorylated to psilocin (4-hydroxy-N,N-dimethyltryptamine), a more lipophilic metabolite that crosses the blood–brain barrier and binds to serotonin receptors, with particular impact at cortical 5-HT2A sites (Tófoli & de Araujo, 2016).

History

Psilocybin-containing mushrooms have long histories of ritual and healing use, especially in Mesoamerican cultures. Nahua, Mazatec, and other Indigenous communities have used these fungi in ceremonial contexts, where they have functioned as tools for divination, diagnosis, and relational repair for at least three millennia (Romero, 2024). In 1955, R. Gordon and Valentina Wasson participated in Mazatec mushroom rituals in Huautla de Jiménez, led by curandera María Sabina (Wasson, 1957). These widely publicized ceremonies marked a turning point in Euro-American awareness of these practices. Media coverage has often sensationalized psilocybin mushrooms as “magic mushrooms,” portraying them as exotic spiritual tools or perilous countercultural substances rather than recognizing their deep-rooted role in longstanding Indigenous healing traditions and ceremonial practices. The attention also sparked scientific interest. Subsequently, French mycologist Roger Heim isolated and cultivated Psilocybe mexicana from these collections (Miller et al., 2023). By 1958 Albert Hofmann had isolated psilocybin and synthetic psilocin was being distributed to psychiatrists and researchers for use in experimental psychotherapy and basic psychopharmacology (Coppola et al., 2022).

Routes of Administration

In traditional and clinical contexts, psilocybin is most often given through oral administration. The oral route is favored because it is familiar, non-invasive, and practical. This approach reduces anxiety and logistical barriers compared to compounds that may require intravenous injection or intranasal administration (MacCallum et al., 2022).

In real-world and traditional contexts, psilocybin is most often consumed in the form of fresh or dried mushrooms that are eaten directly, brewed into teas, or incorporated into foods such as chocolates (Nayak et al., 2023). In these settings, dose is typically estimated by mushroom weight rather than laboratory-precise milligram amounts of the active compounds psilocybin and psilocin (Nayak et al., 2023). Because dosing is based on intact, unprocessed mushrooms as they occur naturally, potency varies across species and between different batches of the same species. By contrast, clinical settings rely almost exclusively on synthetic psilocybin in capsule or tablet form, with precisely quantified doses (MacCallum et al., 2022).

In both cases, oral dosing produces a gradual onset, a broad peak over a few hours, and a fairly predictable 4–6 hour window of acute effects; suitable to both ceremonial structures and billable clinic hours. The gradual rise in effect provides space for participants to orient to the emerging experience and for the effects to unfold within a contained curve, rather than the abrupt, more intense onset that can accompany faster routes of administration (Holze et al., 2022; Meshkat et al., 2025).

Dose

In naturalistic settings, psilocybin is typically dosed in grams of dried “magic mushrooms” rather than in milligrams of active compound. On average, psilocybin content is around 0.5–1.0% of the dried weight, such that 1 g of dried mushrooms corresponds to roughly 5–10 mg of psilocybin. Ceremonial doses of dried psilocybin mushrooms are commonly in the range of 1–3.5 g: 1–2.5 g is considered a “moderate” dose; 2.5–5 g is considered a “strong” dose; doses 5 g and above are described as “heroic” in psychedelic vernacular (Borgford, 2025; MacCallum et al., 2022).

Clinical and experimental work replaces approximate, plant-based conventions with precisely measured synthetic psilocybin. Most contemporary trials administer a single dose in the range of 20–30 mg, roughly equivalent to the psilocybin content of about 2–3 g of dried mushrooms which in psychedelic vernacular corresponds to a "moderate to strong" dose (Garcia-Romeu et al., 2021).

Pharmacokinetics

Absorption

Oral psilocybin is well absorbed in the gastrointestinal tract, where it is taken up by the small intestine and enters portal circulation. In the liver it undergoes first-pass metabolism, which contributes to a slight delay in the onset of initial subjective effects, approximately 20–60 minutes after ingestion. Psilocybin is rapidly dephosphorylated to psilocin, which appears in plasma within approximately 20–40 minutes. The time to maximum concentration (Tmax) is usually between about 1.8 and 4 hours and peak effects occur around 1.5–3 hours post-ingestion, depending on dose and formulation (natural or synthetic) (Holze et al., 2022; Manevski et al., 2010; Otto et al., 2025).

Across the commonly used therapeutic dose range, peak psilocin concentrations and overall exposure increase roughly proportionally with dose, indicating largely linear pharmacokinetics in healthy adults. These absorption characteristics, combined with the relatively short elimination half-life of psilocin, underlie the familiar time course of psilocybin sessions: a

gradual onset over the first 30–60 minutes, a peak window around 2–3 hours, and resolution of most acute subjective effects within about 4–6 hours post-dose (Holze et al., 2022).

Metabolism

Psilocybin is metabolized in a two-stage process. First pass metabolism converts the ingested prodrug, psilocybin, into its active form, psilocin, through dephosphorylation in the gastrointestinal tract and liver. Psilocin is then further broken down primarily in the liver through conjugation and oxidative metabolism, which progressively reduces the amount of active drug in circulation (Holze et al., 2022; Manevski et al., 2010).

Distribution

Once formed, psilocin is distributed widely throughout the body. It enters the systemic circulation and demonstrates a large apparent volume of distribution, indicating that it leaves the vascular space and is taken up extensively into tissues (Otto et al., 2025). Psilocin is lipid-soluble, which allows it to cross the blood-brain barrier and access central nervous system targets (Thomann et al., 2024). Structurally, it is similar to serotonin; once psilocin reaches the brain, it binds to multiple serotonin receptor subtypes, with particularly high functional impact at 5-HT2A sites in higher-order cortical and limbic regions that are central to its psychotropic effects (Tittarelli et al., 2015) .

Elimination

Psilocin is eliminated from the body relatively quickly. Pharmacokinetic studies report elimination half-lives for psilocin in the range of approximately 1.5–4 hours after oral psilocybin, with most of the parent compound and its metabolites cleared within about 24 hours in healthy adults. Clearance occurs predominantly via hepatic biotransformation in the kidneys followed by renal excretion: psilocin is conjugated in the liver to form water-soluble metabolites, which are then eliminated via urine, alongside smaller amounts of unconjugated psilocin and oxidative metabolites (Otto et al., 2025).

Bioavailability

Oral psilocin has incomplete bioavailability, estimated at roughly 50–55% relative to intravenous administration ((MacCallum et al., 2022; Otto et al., 2025). Because of the way psilocybin is absorbed, metabolized, and eliminated, interindividual differences in gastrointestinal uptake and hepatic enzyme activity can produce meaningful variation in peak concentrations and total exposure even at the same nominal dose.

Safety

Based on current clinical and preclinical data, psilocybin and psilocin appear to have wide margins of safety. Clinical and toxicological reviews characterize psilocybin as generally low in somatic risk; the small number of reported fatalities usually involving behavioral or environmental mechanisms (e.g., accidents, jumping) or polysubstance use rather than direct cardiotoxic or neurotoxic overdose from psilocybin alone (Honyiglo et al., 2018; Kopra et al., 2022). Serious adverse events (SAEs), are rare—on the order of five percent or less—and have so far occurred mainly in patients with severe depressive illness and pre-exisiting suicidal ideation, with no psilocybin-attributed deaths reported in therapeutic trials to date (Freitas et al., 2024; Kopra et al., 2022).

Tolerability

Psilocybin has shown to be well tolerated. The acute experience appears to be endurable for most people who take it under real-world and clinical conditions. In addition to transient psychological effects, common physiological effects include mild to moderate, dose-dependent increases in blood pressure and heart rate, pupillary dilation, nausea, headaches, and dizziness. In naturalistic settings, users similarly report gastrointestinal discomfort and vascular symptoms (flushing, palpitations). These somatic symptoms typically emerge within the first hour after ingestion, peak around the time of maximal subjective effects (approximately 1.5–2.5 hours post-dose), and gradually diminish over the subsequent 2–4 hours as the acute psychedelic state resolves (Yerubandi et al., 2024; Ziff et al., 2022).

The most frequently reported adverse psychological effects include anxiety, fear, and transient confusion or disorientation. They often emerge during the ascent or at moments of perceived loss of control. Large clinical trials and meta-analyses indicate that these distressing experiences or “bad trips” are usually containable. With clear framing and continuous interpersonal support, most participants are able to remain in the session; discontinuation or withdrawal due to intolerable acute effects is uncommon. A recent analysis of therapeutic-dose psilocybin trials found that while a high proportion of participants reported at least one adverse effect (most often anxiety, nausea, or headache), serious treatment-emergent events leading to discontinuation were rare (Bukovsky et al., 2025; Carbonaro et al., 2016; Yerubandi et al., 2024).

Toxicity

Psilocybin and psilocin have very low intrinsic somatic toxicity to become physically dangerous or life-threatening. Animal studies indicate wide margins of acute safety: median lethal doses LD50 for psilocybin in rodents are on the order of 280–285 mg/kg orally in rats and mice, and about 12.5 mg/kg in rabbits. Psilocin exhibits lower LD50 values around 75 mg/kg in mice and rats and 7 mg/kg in rabbits. Extrapolated to a 60-kg adult, these values correspond to tens of

grams of pure psilocybin—several hundred times higher than typical therapeutic doses of 20–30 mg used in modern clinical trials—implying a very high therapeutic index. Translating this into whole mushrooms, assuming roughly 1% psilocybin content in dried Psilocybe cubensis, the LD50 range would require ingestion on the order of 1.7–2.0 kilograms, roughly 4 pounds, of dried mushrooms, to which the practical limiting factor is the body's intolerance of that quantity of mushroom material (Shroomery, 2009; Tylš et al., 2014).

Reviews of classic psychedelic adverse events note that documented fatalities from psilocybin alone are exceedingly uncommon, and suspected psilocybin-related deaths

often involve very high doses, co-ingested substances, or other medical vulnerabilities.

In practice, physical danger arises mainly in the context of extreme dosing, co-morbid conditions, substance combinations, or hazardous environments rather than standard therapeutic or ceremonial use (Freitas et al., 2024).

Abuse Potential

Psilocybin and related classic psychedelics have weak reinforcing properties (Matzopoulos et al., 2022). They do not produce the robust dopaminergic reward patterns typical of highly addictive substances such as opioids, stimulants, or alcohol (Johnson et al., 2018). Consistent with this pharmacology, population surveys find that most psilocybin-mushroom users take them infrequently, often a few times across the lifespan, and do not develop patterns of escalating dose, daily use, or stereotypical drug-seeking behavior (Matzopoulos et al., 2022).

Tolerance to psychedelic effects develops rapidly over several consecutive days of use and cross-tolerance occurs with other serotonergic psychedelics, which further constrains sustained high-frequency consumption (De La Fuente Revenga et al., 2022). Importantly, repeated psilocybin exposure has not been associated with a characteristic physiological withdrawal syndrome, and there is little evidence of physical dependence (Heal et al., 2018). Overall, current reviews conclude that medically administered psilocybin, within controlled dosing and therapeutic frameworks, has a relatively low abuse liability and may even exert anti-addictive effects in substance use disorders (Heal et al., 2018; Johnson et al., 2018; Ziff et al., 2022).