

Experience of wellbeing and spirituality in Ayahuasca use

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Table of Contents

Chapter 1- Introduction	6
1.1 Chapter Overview	6
1.2 Definitions of key concepts	7
1.3 Epistemological Position, Relationship to the topic & Reflexivity	10
1.4 Contextualising the topic	14
1.5 An Introduction to Spirituality	16
1.5.1 A brief history of spirituality and psychology	17
1.5.2 Transpersonal Therapy	19
1.5.3 Therapeutic Use of Non-ordinary states of Consciousness (NOSC)	19
1.6 Psychology, spirituality and wellbeing- Current evidence and Clinical Practice	21
1.6.1 Current Understanding of wellbeing	22
1.6.2 Current (correlational) evidence between spirituality, health and wellbeing.....	22
1.6.3 Proposed mechanisms of action	26
1.6.4 Critique of current research literature	30
1.7 A proposed framework -The “New” Numinous	33
1.8 Current inclusion of spirituality within NHS- what do clients and services want?	35
1.8.1 ‘Secular Mysticism’	37
1.8.2 Criticisms of a secular approach	38
1.9 Holistic Cognitive Behaviour Therapy	39
1.10 Psychedelic use; Pharmacological, Psychological and Spiritual	40
1.11 Ayahuasca	42
1.12 Psychological Experiences.....	45
1.13 Ayahuasca and the mystical or spiritual experience	49
Chapter 2: Systematic Literature Review	51
2.1 Chapter Overview	51
2.2.1 Search Strategy	51
2.3 Overview of the literature	56
2.4 Synthesis of Themes	59
2.4.1 Theme 1- The psychedelic or Mystical experience may be overlapping terms	59
2.4.2 Theme 2- Integration of phenomena may be key in understanding effect (including increase in distress).....	60
2.4.3 Theme 3 - Motivation – a mediator of commitment	61
2.4.4 Limitations of this systematic literature review	62
2.4.5 Implications.....	63
2.5 Rationale for the current study	64

2.6 Aims of the current research	64
Chapter 3: Methodology.....	65
3.1 Chapter Overview	65
3.2 Study Design.....	65
Chapter 4: Results.....	81
4.1 Group Experiential Theme 1: Connection	82
4.2. Theme 2: Day-to-day-Wellbeing (it’s useful).....	88
4.3. Theme 3: It’s a relationship	91
4.4 Theme 4: It’s not just Ayahuasca.....	96
Chapter 5 Discussion	101
5.1 Theme 1: Connection.....	101
5.2 Theme 2: Day-to-day Wellbeing.....	109
5. 3 Theme 3: It’s a Relationship	111
5.4 Theme 4- <i>It’s Not Just Ayahuasca</i>	113
Appendices.....	132

List of Tables

Table No.	Title	Page Number
Table 1	Definitions of Key concepts	7
Table 2	Table of pre-suppositions	15
Table 3a	Correlational Studies- spirituality and health	25
Table 3b	Correlational Studies- spirituality and ‘struggles’	26
Table 4	The New Numinous	31
Table 5	Inclusion and exclusion criteria	55
Table 6	Selected Papers following the Systematic Literature Review	59
Table 7	Participant Demographics	78
Table 8	Group experiential themes and subthemes.	84

List of Figures

Figure No.	Title	Page Number
Fig. 1	Holistic CBT Model- (Garraway, 2021)	39
Fig. 2	Perkins et al., (2023) proposed model of Psychedelic influence	44
Fig. 3	PRISMA Flow Chart- systematic literature review	54

Abstract

Background: Spirituality is an important area of investigation in relation to health, the study of which is being requested by clients accessing services as well as large healthcare organisational bodies such as the NHS and the Royal College of Psychiatrists (RCPsych). Its relationship to health and wellbeing is regularly reported as significant yet is poorly understood. Intersecting with this, is the recent re-emergence of psychedelic research as an area for therapeutic use, with recent research suggesting clinical outcomes may be associated with spiritual or ‘mystical-type’ experiences. Ayahuasca practice provides a clear research focal point to investigate reported spiritual phenomena and wellbeing and how these may intersect.

Aims: The aim of this research was to explore people’s experience of wellbeing and spirituality in Ayahuasca use using Interpretive Phenomenological Analysis (IPA).

Method: Semi-structured interviews of 7 UK-based individuals who have used Ayahuasca for both spiritual and wellbeing reasons, (self- reported), were conducted and transcripts analysed using Interpretive Phenomenology Analysis (IPA).

Findings: Four main experiential themes were identified; 1) Connection, (direct, re-connection, and interconnection), 2) Wellbeing- functional applications 3) A relational Process, 4) ‘More than just Ayahuasca’

Implications: These finding contribute to the burgeoning field of psychedelic research and spiritual research as data suggests for some, psychedelic use is a spiritual phenomenon (not solely a pharmacological or psychological experience) and that aspects of self-reported spirituality have a significant role in individual wellbeing, lifestyle, and sense of meaning, which can be complicated to navigate, may change over time and may be associated with stigma.

Key Search Terms: Spirituality, Ayahuasca, Psychedelics, Wellbeing

Chapter 1- Introduction

1.1 Chapter Overview

The current research uses qualitative methodology to explore people's experience of spiritual phenomena and wellbeing after legally consuming Ayahuasca (pronounced Aya-waska). Ayahuasca is a plant-based brew containing psychoactive or 'psychedelic' compounds, which induce altered or non-ordinary states of consciousness (NOSC). Individual accounts often include spiritual or 'mystical-type' experiences which are regularly reported as being highly personal, meaningful or significant, and may potentially be a mediator of change (Strassman, 2000; Timmerman et al., 2023; Dos Santos, 2017; Gandy, 2023). Psychedelic research is rapidly gaining the attention of the scientific and healthcare research community for potential use across a wide range of clinical and therapeutic application (Emerson et al., 2014). The last decade has seen an estimated 1000% increase in published articles across UK, Europe, North America, and commonwealth countries (estimate based on bibliography statistics accessed in 2023), with publications and funding growing rapidly. Despite the rapid rise in scientific and 'mainstream' interest, psychedelic research still remains largely in its infancy, by clinical, therapeutic and pharmacological standards. This is in part due to the complicated socio-political history of psychedelics (Nutt, 2014), but also due to a number of practical and ontological challenges to existing paradigmatic concepts of healthcare (Gedara, 2023) which many clinicians may yet be unaware. In view of this, the current research has been written in a manner to accommodate a reader with no prior knowledge of psychedelics or of spiritual phenomena, in relation to healthcare, and in particular from a clinical psychology perspective. In this introductory chapter, attention will be given to providing definitions of key terminology, as well as providing necessary background information from a socio-political historical context in order to orientate the reader. First and introduction to spirituality within a healthcare context will be provided followed by an orientation to the literature of Psychedelics, in particular,

Ayahwasca. There is a need to emphasise the contextualisation of these topics due to the complexities surrounding past and present discourse, particularly in relation to broader ontology, methods of action, and appropriate clinical use, which still remain areas of ongoing debate (Letheby, 2016; Luke, 2023). The literature provided will be presented from a bio-psycho-social-spiritual perspective of health and wellbeing which often overlap and intersect. Emphasis on current psychological models and theories, as well as the nuanced rationale for undertaking the current research project will be presented. Lastly, a statement will be provided regarding the author's personal and epistemological position as a researcher of this topic, which includes statements of ethical reflexivity relating to this area of research.

1.2 Definitions of key concepts

'Religion and Spirituality are distinct constructs' (Piedmont et al., 2014)

Religion and spirituality are closely related terms with many overlapping factors, and have often been studied interchangeably (Piedmont, 2004; Koenig, 2005). Whilst definitions for both terms vary, recent research suggests that the concepts of spirituality and religiousness, though closely related, each contain sufficient uniquely reliable variances to warrant separate interpretations (Piedmont et al, 2009, Piedmont and Wilkins, 2019; Clark and Hunter, 2022), and that for research purposes, must be considered as two separate constructs (Austin, Macdonald and MacLeod, 2018; Piedmont and Wilkins, 2019). Despite this many studies, both historical and contemporary, use these terms synonymously which will be addressed further in the opening chapter. The following table provides definitions of the key themes that arise in the current research.

Table 1. Definitions of Key Concepts

Definitions of Key Concepts	
Spirituality:	<p>Common aspects of spirituality can be defined as:</p> <p><i>“a set of inner experiences and feelings through which a person inwardly seeks meaning and purpose as well as relationships to self, family, others, society, nature and the significant or sacred (Baumsteiger and Chenneville 2015; Austin et al. 2017) which often includes recognition or belief that there is something greater, inspiring a sense of awe (Spencer, 2002).</i></p>
Religiosity or religiousness may be defined as:	<p><i>“the adherence to beliefs, doctrines, ethics, rituals, texts and practices associated with a higher power either alone or among organized groups”</i></p> <p>(Hood and Spilka 2003, as referenced by Austin, Macdonald and MacLeod, 2018).</p> <p>It should be noted that many people use religion to express spirituality (Garraway, 2021).</p>
Mystical-Experience	<p><i>“Mystical experiences” denotes an altered state of consciousness that may involve a direct awareness of fundamental ‘realities’ free of a sense of a discrete self and of the conceptual divisions that normally structure our mental life. Emotions such as joy and empathy often accompany the experiences.</i></p> <p><i>Mystical states often involve an experiential sense of oneness, transcendence, the ineffable and a noetic, or ‘sudden knowing’</i></p> <p><i>(Jones, 2022)</i></p>

Psychedelic: The term psychedelic was first used by British psychiatrist Humphry Osmond in 1957, and is derived from the Ancient Greek- '*psyche*' meaning 'mind' (or soul) and *dēloun or delos* meaning; to make visible, to reveal, or to manifest, roughly translating as '*mind revealing*' (Carhart-Harris and Goodwin, 2017). Psychedelics are the name given in the 'Western world' to a class of psychoactive substances, both natural and man-made, that induce a 'non-ordinary mental states' by profoundly altering an individual's sensory perceptions, mood, emotions, and cognition (Sessa, 2012). Common examples include Lysergic acid diethylamide (LSD), Psilocybin (so called 'magic mushrooms'), 4-Methylenedioxymethamphetamine (MDMA), and Ayahuasca

Ayahuasca (*pronounced* 'Aya-waska') Ayahuasca is the common name given to a psychoactive, or psychedelic brew used in South-American, Amazonas regions, possibly for millennia (McKenna & Riba, 2016). Ayahuasca is made by boiling or brewing at least two plants together; the leaves of the *Psychotria viridi*, (a green leafy shrub which is part of the coffee family), in combination with a vine (*Banisteriopsis Caapi*). The leaf contains N-dimethyltryptamine (DMT) which is an endogenous or naturally occurring chemical, meaning it is found naturally within the human body. The vine contains a monoamine-oxidase-inhibiter (MAO-I) which temporarily suspends the body's enzymes from 'breaking-down' or de-naturing DMT. Ingestion of this brew has a range of 'psychedelic' effects which typically last between 4-6 hours. These often include altered states of consciousness and spiritual or 'mystical-type' experiences which will be discussed, along with ontological discussions relating to multiple definitions of what *it is*.

Wellbeing: Wellbeing is a subjective term, though an operational definition of wellbeing used by the World Health Organisation (WHO) in clinical health is; *‘a state in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (WHO, 2022).* However, it is acknowledged that the term wellbeing is subject to interpretational discourse (La Place McNought and Knight, 2013), and participants personal definitions are discussed within this research.

1.3 Epistemological Position, Relationship to the topic & Reflexivity

Epistemological Position

The concept of spirituality is found globally, throughout history, in almost all cultures (Peoples, Duda & Marlowe, 2016) yet there is no one definition or universally accepted ontology (Piedmont, 2009; Piedmont and Wilkins, 2019). Conducting empirical and scientific research involving spirituality therefore presents particular epistemological challenges to scientific enquiry and the field of human psychology (Piedmont and Wilkins, 2019). It is important to make the distinction between attempting to measure and understand the origins or explanations for some aspects of metaphysical experiences, (which may fall outside the scope of falsification or validation and therefore scientific endeavour) compared with understanding the experiences, attitudes, beliefs, behaviours and meaning-making arising from spiritual encounters, and in particular what relation these may have to individual wellbeing (Piedmont and Wilkins, 2019; Sandage et al., 2020; Villani et al., 2019). When for example aspects of spiritual encounters are approached from a psychological position or ‘lens’, it is possible to view the topic from a critical-realist perspective, though epistemological and ontological diversity will be discussed.

In addition, psychedelics represent a further ontological challenge (Gebara, 2023) as Ayahuasca, has been described as a drug, a medicine, a psychedelic, a hallucinogen, a poison, a sacred-sacrament and a spirit, each with their own ontology (Labate, 2004; Nutt, 2014; Letcher, 2013; Taussig, 2008; Luke, 2023; Dos Santos, 2021; Sessa, 2012; Dean, 2022). One additional challenge when studying spiritual experiences and psychedelic ones, is that both intersect with a number of questions that relate to the field of consciousness (and changes of, i.e. altered states of). Consciousness, which David Chalmers (2017) aptly described as the “hard problem”, is itself not fully understood, and there is ongoing debate as to whether it might be a primary phenomenon, as opposed to a secondary or epiphenomena, produced by the brain, which in turn gives rise to different ontological positions and possibilities (Carr, 2021). Within the field of human psychology we can measure neural correlates of experiences (Neurophenomenology) we can observe effects of experiences (behavioural and social psychology), but we cannot directly access individual ‘qualia’ of experience and instead must rely on reported experiences (Smith, Flowers, Larkin, 2009). Taking a critical realist position posits that within the psychedelic-induced spiritual experience there is something ‘real and reproducible’ occurring, i.e. there is something tangible that is ‘operating independently of our knowledge or awareness’ and which may belong to a wider ontology in the positivist, materialist sense, *but* which we may never directly access, meaning therefore that it does not ‘*wholly answer to empirical surveying or hermeneutical examination*’ (Archer et al. 2016, as cited in Zhang, 2023 p 1).

Personal connection to the subject

Religious and spiritual practice alongside scientific-based pragmatism have been key pillars in my cultural upbringing and worldview. Integrating these topics personally and professionally has not been simple. One outcome of clinical training is that it has helped me to transform my

understanding and connection to the topic from an implicit position, to a more declarative one (Peterson, 2002), and to ‘map’ or understand the professional and clinical value relating to spiritual phenomena, particularly following a pronounced or acute spiritual or mystical-type experience, even though it may not ‘fit neatly’ into current paradigms.

This project was first conceptualised between 2010-2014 based on several field-research trips to Brazil, where the use of Ayahuasca is legal and holds a culturally protected status based on religious and spiritual heritage, in recognition of indigenous practices that date back hundreds of years (if not millennia), (Boiteux, 2011; Labate, 2004). These visits brought me into contact with Brazilian psychologists who were collaborating with traditional Shamans (a form of traditional healer) from the Amazon region. I had not witnessed anything like this before and it had a significant impact on my life in a number of ways that intersected my personal and professional interests in spirituality and psychology. The first was I witnessed the transformative potential of ceremonial use of Ayahuasca on people’s lives. This included Brazilian locals from both rural and urban settings, who presented with a wide range of mental, physical and spiritual needs. One common presentation was chronic substance misuse, and the rapidity of recovery that was often initially reported seemed radically different to clinical outcomes often reported in the UK. Secondly there were people from European countries who had previously engaged with their local healthcare providers (including the NHS) for a wide range of reasons. Far from the so-called “psychedelic tourism” (which implies a hedonistic “thrill seeking” rationale), there were people who were attending ceremonies with presentations that would likely qualify for ‘step-2’ or ‘Step-3’ level care within an NHS criteria, including re-occurring depression, suicidality, chronic substance misuse, and severe trauma, as well as broader reasons relating to existential crisis of meaning. These experiences challenged my world-view of what clinical psychology could look like, and whether there was a role for

spirituality within healthcare, particularly within the current Euro-centric, largely bio-medical, approach to health and mental health.

Approaching research from personal or subjective experience has and is often discouraged within most scientific schools of thought, and the more that one's individual mind (or consciousness) is 'removed' from a research topic, (such as with pure maths and physics), the more objective and 'scientific' it is considered. However when approaching topics that relate specifically to human consciousness there is danger of this being a tautological position, and there is a growing recognition within science, (even within theoretical physics), of the need to include consciousness and the "I" behind the research, and acknowledged *within* the research (Carr, 2019; 2021). Stanislov Grof one of the pioneering transpersonal psychotherapists, stated that having direct experience within an emerging field can be beneficial to research, and within transpersonal research used the term "*pragmacentrism*" to describe a type of inability to understand the state of something that you have not experienced (Grof, 1992). Other researchers have gone further suggesting that "getting inside the subject matter" is in fact an ethical imperative (Luke, 2011). However, in-keeping with IPA methodology, personal bias and the implication on interpretation, will be reflected on throughout this research (Smith, Flower, Larkin, 2009).

Reflexivity

On completing the project several additional ethical issues were identified and reflected on, which include appropriation, decolonising and ethical responsibilities. One of the challenges that has arisen from engaging with this research is how to best address issues around appropriation, decolonisation, and privilege (Falcon, 2020). Elinor Ostrom first coined the term co-production, which is starting to be recognised as integral to 'best practice' within the field of mental health (Roue and Nakashima, 2022). There are emerging commentaries within the

field of psychedelic research around ‘scientific extractivism’ which has been argued as selectively exploiting local and Indigenous knowledge to its own advantage (Roue and Nakashima, 2022), for example the patenting of traditionally used pharmacological compounds (Luke, 2023). This raises ethical complexities around not only ownership, but recognition of indigenous knowledge or wisdom, as well as ecological access to Ayahuasca, appropriation, and ontological frameworks (Labate, 2004; Gedara, 2023). The Yawanawa peoples of Acre, in Brazil, for instance have published a manifesto describing a framework for responsible and ethical Ayahuasca use and how it may be incorporated within an ecological model of ethno-tourism, providing ecological education, therapeutic use, and using finances generated to further protect the Amazon and indigenous traditions. This however raises other ethical questions relating to Western accessibility, affordability, and the inverse care law, as to who may have access to these resources.

One reflection on completion of this project is that the study design does not directly answer some of these questions or concerns, as indeed the process of conducting this research has itself led to some of these ethical questions being contemplated. As such further reflexivity will be discussed in relation to how these may be addressed, which are current areas for debate and social discourse (Luke, 2023, Roue and Nakashima, 2022).

1.4 Contextualising the topic

This project contains two major themes; spirituality and psychedelic-use in relation to wellbeing. The table below shows a summary of presuppositions. Following this, both spirituality and psychedelics will be introduced in depth to provide context and current understanding from the perspective of clinical psychology, with an introductory note on wellbeing.

Table 2. Broad Presuppositions of the Current Research

Initial pre-suppositions	Selected references
1. Spiritual and mystical experiences can be found in the foundations of many cultures, religions, and have been influential aspects of human experience, motivation and conceptualisation of the world.	Winkelman, (2011; 2018), Pargament (2013), McKenna and Gibra, (2016) Piedmont and Wilkins, (2019) Oxhandler et al., (2021)
2. Plant-based Psychedelics have been used globally, across many cultures for spiritual, cultural and ‘therapeutic’ use, for millennia.	Winkelman, 2018 McKenna and Gibra, (2016), Gandy, (2019) Letcher., 2013
3. Psychedelics have an irrefutable effect on people’s cognitions, affect, and behaviour, which makes them a target for therapeutic use.	Nutt, (2014), Cahart-Harris and Goodwin (2019), Timmerman et al., (2023) Perkins et al., (2023)
4. Spirituality, and spiritual or mystical-type experiences continue to have important effect on people’s lives including aspects of cognition, affect, and behaviour.	Koenig, (2005, 2012, 2016) Paragment (2013), Piedmont (2009) Piedmont and Wilkins (2019), Garraway, (2021)
5. Ayahuasca use has been reported to have a wide-range of implications for personal wellbeing,	Perkins et al., (2023) Timmerman et al, (2023)
6. Many people who have taken the DMT-based psychedelic Ayahuasca, report a spiritual or mystical-type experience, and it is proposed that these may be an important or integral aspect of long-term transformational processes reported	Griffiths et al., (2019), Timmerman et al. (2023), Perkins et al., (2023)
7. The role of the spirituality and mystical-type experiences (psychedelically induced or otherwise) on wellbeing is not clearly understood.	Timmerman et al., (2023)
8. Western Philosophy, which is a pre-cursor to and largely underpinned the scientific movement, has historically largely not included psychedelic-induced altered states (with the exception of a brief spell approximately between 1950-1970) meaning that it’s ontology is comparatively unexamined	Letcher (2013), Letheby (2016)

1.5 An Introduction to Spirituality

'An ancient human phenomena- that's difficult to study'

The history of spirituality is interwoven within the human story. There is no one agreed definition of spirituality, nor an agreed ontology (Piedmont, 2004) yet examples of beliefs and practices can be found across all cultures from 'time immemorial' (Winkleman, 2000; 2011). Definitions regularly include inner experiences and feelings of meaning and purpose (Oxhandler et al., 2020) relationships to self, family, others, society and nature (Sandage et al., 2020) a connection to the profound or sacred (Austin, Macdonald and MacLeod, 2018) and a recognition or belief that there is something greater, often inspiring a sense of awe (Spencer, 2002). The breadth and variety of terminology (Koenig, 2005), cultural, epistemological and ontological challenges (Piedmont, 2009, Piedmont and Wilkins, 2019; Oxhandler et al., 2021) as well as concepts deemed 'ineffable' or 'beyond words' (Brockmeier, 2002) make spirituality a challenging subject to examine, yet its continued significance across time make it an important and defining characteristic of the human species and worth scientific investigation (Winkleman, 2018; Oxhandler et al., 2020; Piedmont and Wilkins, 2019). The earliest known spiritual traditions may date back to prehistoric times, many of which are still practiced today in some form (Peoples, Duda, & Marlowe, 2016). Shamanism for example has been practiced by indigenous peoples globally including North and South America, Siberia, Central Asia, as well as historically in the UK and Europe prior to monotheistic religion (Letcher, 2013; Winkleman, 2018). Practices often involve the use of altered or non-ordinary states of consciousness (NOSC), with concepts of animism; the belief that all things, including animals and plants, have a spirit or soul, being a core attribute (Letcher, 2013). Within the UK this can historically be found in pagan and druidic practices, (Letcher, 2011) though little is known due to absence of written systems, and changing cultural traditions from pagan and polytheistic practices to predominantly monotheistic ones (Luke, 2011). Since the 'age of reason' many

philosophers (Hume, Kant, Hegel, Heidegger, Wittgenstein, Russell) have attempted to make sense of spirituality (often within a religious theological framework), and as the scientific, (predominantly positivist), approach began to emerge as the dominant discourse for health, *'tension grew between scientific and spiritual understandings of the world and health'* (Kao, Peteet and Cook, 2020).

1.5.1 A brief history of spirituality and psychology

With the founding of psychology as a scientific discipline psychologists attempted to define and study the psychology of religion and spirituality (Brockmeier, 2002). William James is regularly cited as marking the first significant scientific attempt to discuss "The Varieties of Religious Experience" (1902), exploring subjective experiences of individuals who had 'profound religious or mystical experiences'. Often characterised by 'noetic' or revelatory experiences of 'knowledge gained' as well as experiencing the ineffable or that which is 'beyond language' (Mosurinjohn, Roseman and Girn, 2023). Rudolf Otto, (building on earlier work by Kant), coined the term the 'Numinous' in an attempt to also describe aspects of religious mystical experience deemed 'ineffable' (Otto, 1958). These included aspects of terror and awe as well as 'majesty' in being in the presence of something "entirely other" (Sarbacker, 2016). It was argued that such experiences were an important aspect of human history and identity and should therefore be studied and better understood by psychologists (Brockmeier, 2002) yet the field was often met with considerable criticism for reasons including scientific validity and cultural value (which shall be presented later in the chapter). The prominent figure of Freud took the position that religious and spiritual beliefs were 'the universal obsessional neurosis of humanity,' consisting of 'wishful illusions' and a 'disavowal of reality' (Freud 1962, as cited in Kao, Peteet and Cook, 2020). This view was challenged by Jung's 'collective unconscious', which proposed that all humans were able to 'access' or understand at some level, symbols, myths, and archetypes that he believed were common to all human

beings, and which reflected a 'spiritual dimension' of human experience (Jung, 1997). Jung's extensive cross cultural explorations helped to draw attention to and define the universality or commonalities of human spiritual experiences found globally (Kaspro and Scotton, 1999), and helped create narratives outside of the dominant euro-centric discourse of religion and spirituality. However, Jung and more broadly the field of psychoanalysis was often critiqued for lack of 'scientific rigour' and empiricism (Skinner, 1954). More systematic, and empirical approaches were developed- Allport, and Maslow sought to examine religiousness and spirituality as a human motivation or 'master motive'. Maslow's concept of 'self-actualisation', argued that the highest level of human motivation involved a spiritual dimension, and posited that spiritual experiences were an important aspect of personal growth and self-fulfilment (Maslow, 1962). Returning to earlier concepts of 'spiritual dwelling' or moments of heightened experience, (Maslow used the term '*Peak experience*') such as moment of profound joy or ecstasy, connection, expanded consciousness and awe (Maslow, 1964), were considered as possible mediators for personal change (Maslow, 1964). The term 'self-transcendence'- was used to denote or attempt to describe experiences beyond ordinary 'boundaries' of thought or 'being'. It was proposed that this state may offer 'freedom from conditioned thought' and behaviour- often a broad goal for psychological therapy (Kaspro and Scotton, 1999). Within this theoretical framework it was proposed that individuals who regularly experience peak experiences are more likely to 'self-actualise', meaning they reach their fullest potential and become more aligned with their authentic selves (Maslow, 1964). Similar to Jung's concept of individuation; the process of integrating personal unconscious experiences into consciousness, the process of which may involve a 'dissonance' or a 'conflict' with cultural norms, but which ultimately promotes 'an individual journey toward wholeness' (Jung, 1959). These concepts, (among many others which are outside the scope of this work) informed the new field of 'transpersonal psychology' and subsequent modes of therapy.

1.5.2 Transpersonal Therapy

Transpersonal therapy aimed to expand, rather than replace existing psychological models and ways of working (Elmer, MacDonald and Friedman, 2003) and often incorporated humanist, person-centred, and existential approaches, in combination with more spiritual or ‘esoteric’ practices to explore the spiritual and ‘transcendent’ aspects of human experience (Elmer, MacDonald and Friedman, 2003). Though broad in its range of clinical methodologies, the transpersonal stance toward spirituality was (as it is currently) that spirituality is a natural aspect of human functioning, and that non-ordinary states of consciousness which are often imbedded within spiritual or religious practice, are naturally occurring or ‘normal’ part of the human experience that can provide meaning, direction, and enhanced functioning such as through ‘day-to-day’ practices and lifestyle choices (Elmer, MacDonald and Friedman, 2003).

1.5.3 Therapeutic Use of Non-ordinary states of Consciousness (NOSC)

In-keeping with the tradition of ‘talking therapies’, the transpersonal approach often utilised language and the therapeutic relation as a means of facilitating exploration, understanding, and growth, but it also developed other techniques including non-linguistic methods to facilitate non-ordinary states or ‘altered states’ of consciousness. Within this context the therapist aimed to facilitate a range of mental states in which a person remains aware, but not in the ‘usual wakeful condition’ (Grof, 1992). These were often induced via a range of psychological methods such as hypnosis, guided meditation, psychodrama (Woolger 1996), as well as purely physiological approaches such holotropic breath-work which utilises intense methods of prolonged deep breathing to induce NOSC (Grof, 1994). The underlying mechanisms often aimed at accessing and integrating repressed memories, emotional traumas, and spiritual insights to promote ‘healing’ and personal growth (Grof, 1994). Some of these methods were criticised for having perceived overlaps with esoteric or ‘new age’ philosophies, and were

considered by some as pseudoscientific. (As of 2023 Holotropic breath work can be found in in-patient services in the US with an evidence base of more than 11,00 patients treated for trauma, depression and anxiety [Eyerman, 2013]).

This same period between the 1950'-1970's also saw the rise of pharmacological methods to induce altered states namely through the use of psychedelics such as Lysergic acid diethylamide (LSD), psilocybin ('magic mushrooms') as well as 4-Methylenedioxy methamphetamine (MDMA) or 'ecstasy' (Sessa, 2012). Early work often studied the effects of LSD (which was then legal) on psychiatrists, psychologists and artists before working with patients with a range of mental health diagnosis (Sessa, 2012). Many of the early studies across the US and Europe were considered 'ground-breaking' within the field of mental health research including treatment for people with enduring or 'treatment-resistant' conditions and those with severe trauma-based experiences such as survivors of the Holocaust (Sessa, 2012). By the end of 1960's it is estimated that 40,000 patients were treated with psychedelics with over 1000 papers written on the subject which often reported overwhelmingly positive results particularly with 'treatment resistant' populations (Sessa, 2012). Therapist explored methods of integrating aspects of spirituality (particularly Eastern traditions) such as meditation, chanted verses and a relaxation to enhance the therapeutic 'setting' which is now understood to be such an integral aspect of psychedelic assisted therapy. In addition to clinical therapeutic benefits, an array of new data began to emerge that at high doses of psychedelics people regularly, and consistently, reported experiencing mystical, spiritual or religious experiences (Schuster, 2006). The Famous "Good Friday Study" by Harvard researcher Walter Pahnke, conducted a double-blind placebo-controlled experiment using psilocybin which found 90% of participants reported a profound spiritual or religious encounter (Nichols, 2006). In follow-up studies many years later, participants still reported these mystical experiences as being hugely important and having contributed to their spiritual lives (Nichols, 2006). By the end of the 1960's psychedelic

use had a profound impact on ‘counter culture’ in the US and UK, which saw a rise in unregulated, psychedelic use, and a growing concern for the negative consequences and detrimental impact on people’s lives and health (Sessa, 2012). Scheduling of psychedelics under emergency laws by the Nixon administration, based largely on faulty science and social-political pressure of the day, led to an almost impossible task of attempting to research it. Prominent Neuroscience researcher Dr Rick Strassman noted research into psychedelics was made ‘*almost all but impossible*’ and to pursue this was viewed as ‘*career ending*’ (Strassman, 2000). As such the field of altered states research within therapy was abandoned. Prominent Neuroscientist, and former Government Health advisor, Professor David Nutt, referred to this as the worst censorship in science since Galileo (Nutt, 2014). Within the same year a significant review by psychologist Victor Sanua, (1969) concluded that there was no empirical evidence to support the theory that religious belief contributed to mental health and general well-being. The 1970’s onwards saw the rise of cognitive and behavioural psychology, and interest in spirituality, altered states and the potential for therapeutic use became largely side-lined (Cahart-Harris and Goodwin, 2017; Kao, Peteet and Cook, 2020). In addition the idea that therapists could integrate ideas of spirituality and religiousness into therapy became predominantly deemed as inappropriate within a secular context (Sansone, Khatain, and Rodenhauser 1990 ;Kao, Peteet and Cook, 2020).

1.6 Psychology, spirituality and wellbeing- Current evidence and Clinical Practice

The past few decades have seen renewed interest in spirituality as a mediator for health (Koenig, 2008; Hunter and Clark, 2022). It is estimated that more than 30,000 articles have been published worldwide in the last two decades relating to Religious and Spiritual beliefs (R/S) and largely associated outcomes of better mental health, wellbeing, quality of life, as well as physical health (Peres et al., 2018; Koenig, 2005; Piedmont, 2009; Piedmont and Wilkins, 2019; Hunter and Clark, 2022; Kao, Peteet and Cook, 2020). Critically there is also research

suggesting the inverse (Sandage et al., 2020), or no difference (Smith, McCullough and Poll, 2003), and remains challenging to study empirically, which will be presented.

1.6.1 Current Understanding of wellbeing

Wellbeing is used within this research as it is a universal concept that can apply to all peoples, independent of a presence or absence of more formal mental health diagnostic criteria. Wellbeing is a broad concept that has changed across time in-keeping with new research and understanding. It draws upon social, psychological and biological theories to provide a holistic understanding of what contributes to the ‘promotion of health’, which does is not synonymous with the ‘absence of illnesses. In this respect it may refer to how a person feels or functions, regardless of the presence of illness. Within clinical psychology, the term is often applied to ‘mental wellbeing’ as a description and measure of both ‘feeling good’ (eudemonic and hedonic), which may include concepts such as self-acceptance, confidence, a sense of agency or purpose, as well as ‘functioning well’ across multiple domains which may include inter-personal relationships or employment. Wellbeing is a holistic term, meaning that it incorporates conceptual theories drawn predominately from biological, psychological, and sociological models of health and functioning. To a lesser extent aspects of spirituality are also sometimes included within this model, which may be referred to as bio-psycho-social-spiritual model of being. Wellbeing is a widely used concept, and aspects of the bio-psycho-social model are well researched. Spirituality within health and healthcare, by comparison, is an area that is not well understood, for reasons which be outlined in the current research

1.6.2 Current (correlational) evidence between spirituality, health and wellbeing

Within the last several decades clinicians and researchers are steadily finding evidence linking spiritual and religious practices and beliefs, with mental health and wellbeing outcomes which have often implied a positive effect (Sandage et al., 2015; Oxhandler et al., 2021; Piedmont,

2020), though there is also growing evidence suggesting challenges to health and wellbeing that may be specific to people with religious or spiritual beliefs (such as spiritual struggles, or spiritual crisis Evans and Read, 2019) as well as the impact of limited service provision and support for issues specific to these needs (Oxhandler et al., 2021; Clark and Hunter, 2022). The table below presents a summary of some of the key studies within the last two decades.

Table 3. Correlational Associations between R/S and health/wellbeing/ service provision

Author (s) and year	Brief summary of Results Reported (Globally)
Hugulet et al., (2011)	People who had spiritual needs included as part of their mental-health assessment were more likely to attend a follow-up appointment.
Koenig et al., (2012)	A review found 80% of studies reported a positive link between spiritual practices and increased mental health.
Pearce et al., (2015)	Results of a clinical trial suggested that integrating SR beliefs into treatment is beneficial for mental health outcomes. Suggestion that integration of RS within healthcare found a significant effect on alleviating anxiety.
Piedmont, (2012)	Research investigating scores on the Assessment of Spiritual and Religiousness Scale (ASPIRES) have been linked with success in therapy (especially in the areas of substance abuse), which suggests applicability within a clinical setting
Sandage et al., (2020)	Client spiritual well-being and spiritual struggles predicted psychosocial functioning over and above mental health symptoms, which has significant clinical implications (Sandage et al, 2020).

Oxhandler et al., (2021)	A clinical trial investigating integration of RS within healthcare found a significant effect on alleviating anxiety, depression, alcoholism and stress
Smith, McCullough and Poll (2003,a)	A meta-analysis examined the results of 147 studies that included almost 10, 0000 participants, finding an average inverse correlation between S/R and depression.
Braam & Koenig, (2017)	A review of 152 prospective studies found , 49% reported at least one significant association between S/R and a better course of depression, 41% showed a non-significant association, and 10% indicated an association with more depression, resulting in an small effect size between S/R and reduction in depressive symptoms
Balbuena, Baetz and Bowen (2013)	Longitudinal follow up study (n=12583) participants found that regular religious attenders had a 22% lower risk of depression compared to non-attenders (results after adjustment for ‘confounding variables’). Spiritual beliefs were not associated with depression in this sample.
Miller, Warner, Wickramaratne, and Weissman (1997).	A longitudinal study (n=114) found those who reported religion or spirituality as very important had reduced rates of major depression compared to other participants.
Bodok-Mulderij et al., (2023a)	Study a n=874 showed that R/S was significantly associated with less depression
Bodok-Mulderij et al., (2023b)	Study b n=1,029 showed R/S was significantly associated with less anxiety symptoms

There is also a growing body of research which suggests health and wellbeing can also be mediated negatively due to aspects of religious or spiritual struggles. Themes that are

associated with this include guilt, isolation, ‘spiritual bypassing’– a term used to denote avoidance or escapism through spirituality, (Welwood, 2000). There are also acute challenges such as ‘spiritual awakenings’ or ‘spiritual emergency’ where an individual may experience sudden or spontaneous changes to somatic and psychological perceptions and which, without support, can be ‘psychologically disorientating’, disruptive, and cause distress or suffering (Read and Evans, 2019).

Table 4. Difficulties associated with spiritual ‘struggle’

Author (s) and year	Brief summary of Results Reported (Globally)
Pargament & Exline, (2023, in press).	The authors noted emerging research on psychological impairment stemming from spiritual and existential issues crisis
Sandage et al., (2020)	Found that clients’ level of spiritual struggle were negatively related to spiritual wellbeing and mental health but positively related to ‘quest exploration’ (the act of pursuing spiritual meaning) and desire to engage SR issues in therapy.
Sandage et al., (2020)	concluded that; <i>“Two aspects of clients’ relational spirituality (spiritual well-being, spiritual struggles) predicted psychosocial functioning beyond the effects of mental health symptoms, which raises clinical and research questions about the potential advantages of multi-dimensional assessment of client spirituality and potential costs of not doing so”</i> .
Evans & Read, (2019)	Reported that intense spiritual exercises may in some instances cause or trigger spiritual crisis, which if not guided or managed can lead to mental health crisis such as depression, mania and psychosis

Anderson-Schmidt et al., (2019) ‘Religious delusions’ have been shown to be associated with a poorer prognosis. Nonpsychotic religious beliefs are generally associated with better outcomes

Despite increase in data and number studies, almost all studies to date are correlational, relying predominantly on self-reported measures. Underlying mechanisms of action are far from established, though there have been many proposed ideas which are now presented.

1.6.3 Proposed mechanisms of action

The mechanisms of action between spirituality (and religiosity) and health are not fully understood though there is a growing body of literature proposing a range of mechanisms, including more recent inclusion of neuroimaging and biometric data. This section reviews current proposed methods of action. Attempts have been made to review and isolate research specific to spirituality, though it is often not possible due to the inclusion of religion or religious practices within many of the studies, which will be discussed further below.

Spiritual Practices

The last two decades have shown increasing evidence, including neuroimaging studies, for the potential benefits of specific spiritual practices. The most well-known being meditation. Meditation, whilst largely associated with Buddhist practice, can be found across many spiritual and religious practices. Mechanism of action in meditation have been attributed to aspects of emotional regulation and decentering which are significantly linked to lower rates of depression and greater functioning (Kessel et al., 2016). It has also been associated with fostering virtues such as gratitude, forgiveness and peace which are associated with greater wellbeing.

Inversely some spiritual practices have been implicated in triggering acute spiritual crisis or spiritual emergency, which without guidance, support or belief structures in which to integrate experiences, can become severe mental health crisis (Evans and Read, 2019). Practices such as Kundalini-Yoga, intense breathing exercises, and practices involving ‘sacraments’ or substances have been associated with sudden changes in somatic and psychological perception and alterations in worldview or sense of self which can be acutely distressing and overwhelming (Evans and Read, 2019).

Pro-sociality

Social groups are often more commonly associated with organised religions and thus much of the literature is from this perspective, however there are overlaps with group spiritual practice. It has been proposed that religion and spiritual collectives promote pro-sociality through regular attendance of groups which may be a mediating factor for wellbeing and reduced mortality rates (Hovey, Hurtado, Morales, and Seligman, 2014). The implications are that this exposes people to greater social support and increased social cohesion which are well established factors in wellbeing. However, research into regular ‘secular’ group activity such as volunteering, has shown some equal comparisons (Galen, 2018). One explanation is that ‘group embeddedness’ and the strengthening of worldview-conviction through shared beliefs may attribute to increase in wellbeing (Galen, 2018). This has been proposed as an explanation for wellbeing in both religious and non-religious settings through the theory of ‘normative fit’ which suggests less cognitive dissonance (implicated in poorer mental health) is found when peoples beliefs match those of the people around them (Galen, 2018). In this regard it has been suggested that the degree to which a person’s social structure or culture matches their own which may be important to wellbeing, whether religious/spiritual or secular (Galen, 2018).

Relational Spirituality

Relational spirituality is a term used to describe how a person relates to ‘the sacred’ (Sandage and Schults, 2007). It can refer to the dynamic relational process between an individual and ‘whatever they hold to be sacred’ (Tomlinson, Glenn, Paine and Sandage, 2016). It has been proposed that this relation may be a key mediator in a person’s wellbeing and mental health (Tomlinson et al., 2020). This may relate positively with feeling of unconditional love, or sense of purpose, but it can also relate to negative aspects such as feelings of guilt or feeling unworthy (Sandage et al, 2020). Erickson first proposed an ‘attachment model’ in how people relate to ‘God’ or ‘the sacred’. Though predominantly a theological concept more recent studies also include an attachment style to God, having a mediating effect on wellbeing, which includes correlation for difficulties in wellbeing for those with ‘insecure attachment’ (Ellison et al, .2014). It has also been proposed that relational spirituality may play a role in transcendent encounters (Kao, Peteet and Cook, 2020) which have been implicated in positive coping with a range of health related difficulties (Glannon, 2004). Similarly to de-centering, it has been proposed that ‘transcendence’ may promote not only a different perspective of a situation such as coping with chronic or end-of life conditions, but may in fact alter the experience or relationship to physical aspects of suffering such as pain (Glannon, 2004). In addition it has been proposed that transcendent encounters, such as experienced in concentrated prayer or meditation, may have an effect on the hypothalamus-pituitary-adrenal axis (HPA) via increased blood-flow and neurotransmitter activity, particularly serotonin and dopamine (Seybold, 2007) which are implicated in mood, motivation, and sleep among other aspects of wellbeing (Seybold, 2007).

Spirituality as an ‘internal resource’ or coping strategy

Zhang et al., (2019) conducted research with 300 people who had experienced loss following natural disasters. They found that spiritual fortitude; *‘the ability to draw on transcendent, spiritual resources to deal with negative emotions when facing severe stressors’* had a significant effect in reducing impact of PTSD. Other research has suggested that spiritual belief may reduce ‘fear of the unknown’ which has implicated as a mechanism between psychological distress and life meaning (Ostafin, Papenfuss and Vervaeke, 2021).

Beliefs influencing behaviour and perspectives

It has been proposed that spiritual practices may be associated with greater degree of evaluation of ‘morality’ promoting qualities such as gratitude and forgiveness which have been shown to be beneficial in reducing anxiety and depression (Kao, Peteet and Cook, 2020) as well promoting acts of ‘altruisms’ such as increased charitable work which has been shown to be beneficial in aspects of personal wellbeing (Galen, 2018). This has been one of the proposed mechanisms to explain lower rates of substance misuse and completing suicide. Similarly Bodok-Mulderij et al., (2023) found self-compassion as one of the mediating factors in the relation between religion/spirituality and mental health particularly for symptoms of depression and anxiety.

Biological components

The relation between R/S and biological factors that may impact wellbeing is a growing area of interest, and in-keeping with much of the field of research correlational associations have been reported, though relations remain largely unclear (Mosqueiro et al., 2019). Concepts such as reported experiences of ‘self-transcendence’ have been linked to serotonin availability (Kim et al, 2015) and correlations have been reported implicating changes in dopamine, serotonin,

and oxytocin as correlates of spiritual experiences (Anderson et al., 2017). Other aspects such as ‘cortical thickness’ which has been implicated in a range of aspects in wellbeing such as resilience and possible lower incidence of depression have been shown to be increased through practices such as regular meditation (Kang et al., 2013).

Spiritual Struggles

The underlying mechanism related to spiritual and religious struggles and poorer mental health outcomes have been proposed as mediating aspects of negative self-appraisal, guilt, disconnection, self-esteem, and cognitive dissonance (Kao, Peteet and Cook, 2020).

1.6.4 Critique of current research literature

Dittes (1969) commented that many researchers over the decades have been attracted to the study of spirituality, but have often ended up “*bewildered by the difficulties*” inherent in studying the subject (1969,p. 603). One of the fundamental assumptions often asserted of spirituality (and of religion) is that these constructs ‘*must exert influence on psychological outcomes in a manner distinct from secular mechanisms*’ (Galen, 2018, p3). However attempting to study this area according to the ‘principles of scientific reductionism, and demonstrate uniqueness of construct’ (Galen, 2018, p3) is difficult for a number of reasons presented below.

Defining constructs and issues of terminology

Given the long history and universal nature of spirituality and religion, it is understandable that there are many differing terms and definitions covering a variety of practices, beliefs and customs (Winkleman, 2011). Within the body of western scientific literature, many studies have used, (and still continue to use) the terms spirituality and religiousness synonymously. As a result it can be difficult to understand exactly what is being measured or investigated by psychologists in relation to health (Kao, Peteet and Cook, 2020) and what the outcomes imply

(MacDonald & Friedman, 2002; Piedmont and Wilkins, 2019). The synonymous use of these terms make it difficult to identify specific variables, and therefore validity of any constructs. For example religion is often associated with pro-sociality , shared culture, social cohesion and social support (Paragment, 2002). Whereas spirituality ‘may’ refer more to aspects of a person’s ‘inner working’ or internal constructs (Kao, Peteet and Cook, 2020) Belief structure, and practices such as prayer, meditation singing may permeate both (Koenig, 2005; Tepper et al, 2001).

Overlapping or ‘redundant’ constructs

One of the core criticisms of this field is that current psychological and social constructs already explain much of what is being measured or reported (Van Wicklin, 1990). For example secular volunteering has been found to reduce mortality rates in much the same way as religious attendance, implying that benefits reported in religious or spiritual settings, may have secular explanations (Galen, 2018). In addition some researchers have reported that reported outcomes of wellbeing and spirituality/religion may not always be sufficiently controlled for alternative variables. Galen, Sharp, and McNulty (2015) have reported that when controlling for demographic factors such as education and income, effect sizes are greatly reduced.

Cultural Constructs

An additional issue that has arisen with synonymous use of religion and spirituality is that it has led to a heavy ‘Judeo-Christian’ bias within the literature, which has largely come from the US and Europe, which have historically had a majority Christian heritage (Oxhandler et al., 2021). To this extent many attempts to create scientific measures have theological constructs, and may lack generalisability outside of a specific cultural group or religion (Oxhandler et al., 2021). This has been particularly emphasised within the last few decades with a rise of, (or recognition

of), those who do not identify with a religion, but consider themselves spiritual (Sandage et al. 2020; Garraway, 2021) further highlighting the need for more nuanced constructs.

Issues relating to study designs

Without clear definitions of terminology, it is difficult to know what is being measured, which makes it hard to build reliable constructs and measures (Piedmont and Wilkins, 2019). Psychological models are typically created from compiling large data over time, and designing studies to incrementally test concepts, which may include the development of measures tested across populations for reliability and predictive validity (Piedmont, 2009, 2021). One challenge that has been commented on is that over the last century there is a large body of unconnected studies, examining an array of constructs and their impact of broad range of outcomes (Piedmont, 1999), which are almost predominantly correlational (Kao, Peteet and Cook, 2020). It has been commented that many of the studies to date have often been small-scale specific to particular regions, demographics, and practices (Cashwell et al., 2001; Schaffner and Dixon 2003) with over-reliance on self-report univariate, correlation studies, which often lack a control or account for other mediating variables (Piedmont, 2020). In addition there are researchers who express that aspects of religion and spirituality may be outside of falsifiable testing, (for example the existence of ‘God’), which has led to some researchers declaring it an area that will not lend itself to scientific enquiry. However a strong case has been made that it is possible to develop reliable constructs through incremental, cross culture testing and to compare this with observational health outcomes (Piedmont and Wilkins, 2019).

Summary of criticisms within the study of spirituality and health can be summarised as the following;

1. There is no agreed definition of what is meant by the term spirituality

2. This is compounded by using the terms of religiousness interchangeably or synonymously with spirituality which further confounds variables being measured, and adds additional cultural bias to investigations
3. These contribute to a lack of reliable ontological and epistemological understanding
4. Therefore, (and largely for the above reasons), there is no clear understanding of the way underlying ‘mechanisms’ of spirituality (and religiousness, as a separate construct) act on health, wellbeing, and mental health.
5. Combined these perpetuate criticism that the study of spirituality (and religiousness) may not add anything to the understanding of wellbeing

1. 7 A proposed framework -The “New” Numinous

By far the most systematic, methodical and incremental research to date has come from Piedmont et al., (Piedmont, 2009, Piedmont, 2014, Piedmont 2020, Piedmont and Wilkins, 2019) who have over the last decade have collated and tested the construct they refer to as the Numinous (distinct from Otto’s version exactly 100 years before, or Erickson subsequent version, but both acknowledged within the construct). This ‘new’ numinous has in part been conceived by compiling aspects from wide range of measures which are not sufficiently explained by other psychological constructs or model. They have used the Five Factor Model (FFM) which has good longitudinal and cross cultural validity, to test aspects of this model, for psychological overlap or ‘redundancy’. From dozens of studies the authors conclude that:

“The numinous is a distinct dimension of psychological functioning that incorporates a number of linked qualities (e.g., meaning making, worthiness, transcendence) and is related to an array of outcomes (e.g., well-being, purpose in life, mental health) that provide it with an extensive range of interpretive and predictive abilities.” (Piedmont, 2020)

They have proposed the Numinous as the 6th personality trait, containing unique aspects not yet catalogued by this FFM (Piedmont 2009, Piedmont and Wilkins, 2019). The following is based exclusively from the extensive work done by Piedmont and colleagues (Piedmont, 2009, Piedmont, 2014, Piedmont 2020, Piedmont and Wilkins, 2019), which has been conducted across multiple countries, faith groups, as well as with ‘non believer’ or ‘atheist or agnostic’ groups. This model represents a systematic testing and re-testing of the models incremental validity, which has been conducted over a 20 year period. From this work they propose the following assumptions.

Table 4. 9 assumptions of the Numinous (Piedmont and Wilkins, 2019).

1.	It is not a product of worldview, philosophy or religion, but it precedes these constructs
2.	All peoples share it to varying degrees (controversially, even those who are agnostic or atheist).
3.	The numinous creates a trajectory for people across time, whilst it may change and morph, it can always be ‘identified’ by self or others
4.	It is not redundant i.e. cannot be fully explained by other psychological models
5.	The Numinous is not a single variable or construct- but contains mysticism, faith, maturity, and spiritual wellbeing
6.	It has robust incremental predictive validity
7.	It does not ‘sit outside’ the realms of observation (i.e. it is not solely metaphysical) , but instead finds expression in behaviour – which can be measured using self-report as well as factors such as health and life outcomes
8.	Needs more cross cultural data to confirm validity, but proposes that this concept is like a trait spectrum and can (controversially) still apply to ‘ non-believers’, agnostic or atheist

-
9. And lastly that it plays a role in the mental life of people- this can account for aspects of good and bad MH
-

Piedmont et al., (2009) tested a variety of causal models and found that spirituality as a causal input into both religiousness and psychological growth/maturity. From this model, Piedmont and Wilkins (2019) infer that there is something inside of us that makes ‘metaphysical ultimacy’, and experiences of the sacred, important stimuli for humans. They argue that this goes some way of providing evidence that humans are “hard wired” to connect with these issues, and that these qualities are somehow genetically embedded within our genome (Piedmont and Wilkins, 2021). They conclude that the numinous is what makes both religion and spirituality important in finding ultimate meaning, to seek out a transcendent sense of self, and giving an ultimacy and an individual place in life. The above model has gone a considerable way in using incremental testing to test for, predictive value, applicability to a range of peoples, and minimising overlap with other psychological constructs. Whilst psychological trait theory has its criticisms, this model is a significant attempt to include spirituality within the field of psychology in a systematic and robust way.

1. 8 Current inclusion of spirituality within NHS- what do clients and services want?

The department for Health, England stated “Spirituality and an individual’s religion or beliefs are increasingly acknowledged as playing an important role in the overall healing process” (Department of Health, 2009, as cited in Garraway 2021), with the Royal College of Psychiatrists also having published formal statements on the importance of religion and spirituality in psychiatry (Cook, 2013; Kao, Peteet and Cook, 2020). Literature suggests that a large percentage of people with religious or spiritual beliefs believe these to be important to their wellbeing (Sandage et al., 2020) and that clients accessing mental health services would

like to see its inclusion in the therapy room (Faulkner, 1997, Powell, 2003, Oxhandler et al., 2021). This may be particularly relevant to psychology where clinicians are less likely to be religious or spiritual compared to their clients (Neeleman & Lewis, 1994), and psychologists may therefore be less likely to see spirituality as a relevant area to explore (Garraway, 2021). A study by the Mental Health Foundation found more than 50% of service users hold religious or spiritual beliefs feel they are important in helping them cope with mental wellbeing though it is also reported that clients do not feel as able as they would like to discuss this with healthcare providers (Powell, 2003).

Despite the growing calls for the inclusion and recognition of individual's religious and spiritual beliefs within healthcare by large organisational bodies such as NHS England (2009) and the Royal College Psychiatrists (2003), as well as the growing body of evidence relating to impact on wellbeing (Sandage et al, 2015, Oxhandler, 2021, Piedmont, 2020, 2023) there is currently little support offered. This has been described by mental health researchers as a "sizeable and harmful gap" in mental health services in the provision of support for people's religious and spiritual needs (Evans & Read, 2019). Powell (2003) commented that it is currently required for NHS clinicians to capture data on spirituality and religious beliefs, though follow up is rarely completed (Powell, 2003). When it is, chaplaincy or pastoral counselling has historically been the route of referral, which attempts to integrate theology and psychology in the treatment of mental health challenges (Townsend, 2009). However this has predominantly focused on Christian faith, with more recent recognition and inclusion of other faith groups such as Judeo or Islamic groups, often by means of 3rd sector resources (Kao, Peteet and Cook, 2020). However there is currently almost no provision for those who have spiritual needs but subscribe to other religious traditions, or those that do not subscribe to a religion at all (Kao, Peteet and Cook, 2020). Currently the NHS demographic information capture system does not include spirituality as distinct from religion, meaning that under the

current system if someone does not identify with a religion, clinicians may imply that spirituality is not relevant to that individual (Garraway, 2021). In addition, research suggests that psychologists are much less likely to be spiritual or religious compared with the clients they see, and may not be aware that clients with RS needs, do indeed want to include this within the therapy room (Oxhandler et al., 2021), or may not know how to incorporate this (Garraway, 2021).

1.8.1 'Secular Mysticism'

One current form of integration of aspects of spirituality into the NHS has been through the secularisation of various spiritual and religious practices, which could be argued, is an attempt at 'secular mysticism'. The term "secular mysticism" was first coined by the anthropologist Mircea Eliade (Rennie, 2008) to denote practices found in religions, but used in the 'humanist' sense, with a removal of religious belief structures. Within this framework, there have been several successful attempts to translate aspects traditionally found in religious practice or spiritual practice, and 'converting' or adapting into secular ones. The most well known in the UK is mindfulness, developed by John Kabatt Zinn, which was directly influenced by Buddhist practices, and is now included in the so-called third wave (CBT) therapies. Mindfulness has received scientific interest for the psychological and biological benefits shown through practices, and has good evidence for effective outcomes (Ludwig and Kabatt-Zinn, 2008). Other methods that have drawn inspiration from faith-based practices include Acceptance and commitment Therapy (ACT), similar to Paul Gilbert's (2009) Compassion Focused Therapy (CFT), draws on many aspects of spiritual and religious teachings, but which has adapted them in a secular approach, and given an evolutionary psychology framework. Additionally positive psychology which utilises aspects often associated with spirituality such as gratitude forgiveness, and compassion (Davis et al., 2013), as well as Yoga for a range of mental health treatments including eating disorder (Bordon and Cooke-Cottone, 2020).

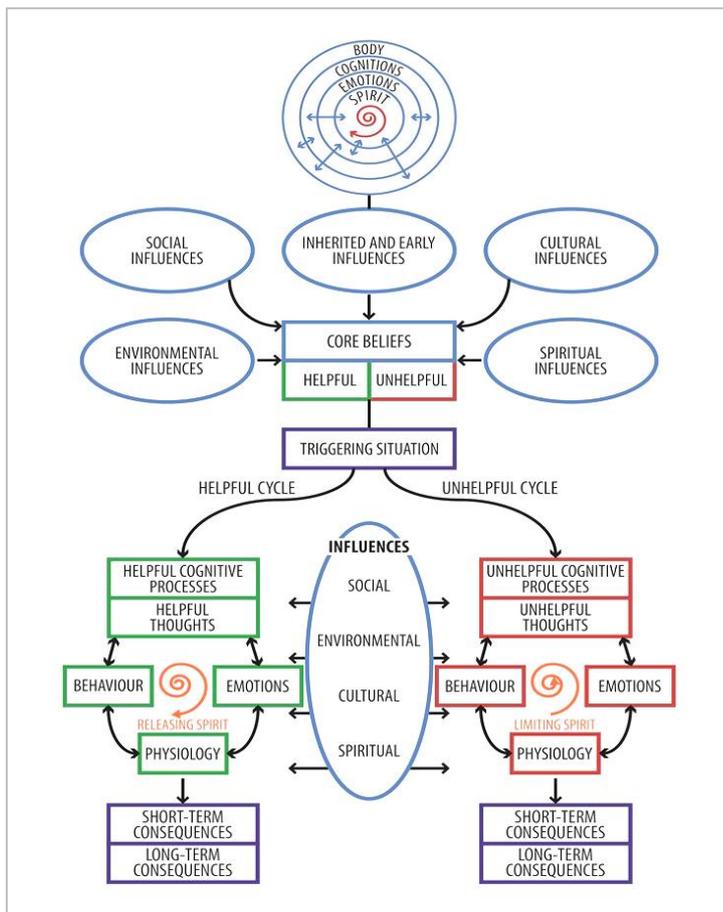
1.8.2 Criticisms of a secular approach

The ‘extraction’ or secularisation of spiritual practices is often done by limiting aspects of practices and re-defining them with a “naturalistic” framework (Harris, 2014) such as psychological or physiological measures parameters which look at narrower constructs such as low mood, or pain reduction. What is often removed are broader more existential concepts that may promote ways of connecting to a ‘larger picture’ ways in which they exist within the world (Harris 2014, Letheby 2017). In the same way that individual therapy, such as CBT has been criticised for potentially lacking ‘systemic thinking’ (how a person fits in to larger structures such as Bronfenbrenner ecological model, or Bateson’s system theory), the removal or extraction of ‘spiritual elements’ from a larger context, something fundamental may be lost in this process (Pargament, 2013). The aspects that are often removed may include the domain of the sacred, personal transcendence, ‘finitude’ and transpersonal connectedness (Pargament, 2013). Current modes of clinical practice which are predominantly based on ‘secular’ ideas of health, may not be in-keeping with the clients who use those services (Powell, 2001). Equality and diversity policies call for ethical and culturally sensitivity when delivering care, which should therefore also include aspects of spiritual and religious identity to be effectively integrated into treatment (Sandage et al., 2020). Furthermore, the recent NHS Integrated care systems (ICSs) initiative aims to provide a holistic approach to mental health care which involves clear 3rd sector, and community involvement, yet presently does not include any clear inclusion for spiritual or religious support despite the growing evidence for its need. *“Despite this recommendation within an NHS publication most mental health services still have some way to go in order to provide a holistic approach that acknowledges spirituality”* (Garraway, 2021- Holistic CBT) Toscano, Canner, Lightchaser & Piedmont, (2016) stated that; *“Spirituality, if ‘operationalised’ can be a source of psychological motivation deemed relevant for understanding the strivings of all individuals as an essential element in human experience*

which provides meaning, regardless of affiliation.” It has been commented that MH professionals may have concerns about starting to explore this area and then not knowing what to do with the information acquired, and not having a *framework with which to work with it* (Garraway, 2021).

1.9 Holistic Cognitive Behaviour Therapy

One alternative approach around this conceptual challenge has recently been put forward with the development of the Holistic CBT model, which is currently being piloted in the NHS with its “Free to be me” course. (Garraway, 2021). This model of therapy seeks to utilise the traditional evidence based approach of CBT but with the addition of key ‘holistic’ elements within both the formulations and session scheduling. One of the major aspects is the addition



of religious or spiritual beliefs into the formulation. By including core beliefs about the self, coping mechanisms and resources, as well as difficulties arising from belief systems, then the person as a whole, including elements deeply personal to authentic self, can be utilised and examined as part of therapy, and how these may interact with thoughts, beliefs and behaviours (Garraway, 2021). Figure 1 shows the principles of the formulation.

Figure1. Holistic Cognitive Behavioural Therapy Model (Garraway, 2021).

To successfully accomplish this requires the therapist to have a sensitivity to the nuances of the worldview of their clients and should therefore be an area for consideration when working with clients (Piedmont and Toscano, 2019). In addition, it is important for clinicians to understand the possible impact. A qualitative study by Murray et al. (2007) found spiritual distress was modulated by the perceived lack of understanding of the issues by health providers.

Whilst psychological ontology still remains an area for further development (Piedmont and Wilkins, 2019) research to date has overwhelmingly shown aspects of religion and spirituality to be motivational drivers for behaviour (Piedmont & Wilkins, 2019) and a mediator for people's experience of wellbeing (Piedmont & Toscano, 2019), both positive and negative (Sandage et al., 2020) "*spirituality is relevant to clinical psychology because it is a significant aspect of human experience that can impact mental health and well-being*" (Garraway, 2021).

Whilst research into spirituality and wellbeing continued over the last several decades, psychedelic research remained at a virtual hiatus globally until the turn of the century, due to legality and stigma (Strassman, 2000). As such there has been little to no cross-over research within the last 20 years.

1.10 Psychedelic use; Pharmacological, Psychological and Spiritual

The last 5-10 years has seen an 'explosion' of research, which has been dubbed as the 'psychedelic renaissance' (Sessa, 2012) with the scientific health community 'picking back up' from this hiatus. There has been an enormous amount of positive research from a wide range of benefits (Sessa, 2012; Perkins et al., 2023). Studies continue to regularly report the presence of mystical experiences (Luke, 2022) which raise the issue of how do clinicians make sense of and work with these experiences if they are to be used as therapeutic tools, as unlike the secularisation of practices such as seen with mindfulness, are unlikely to be able to be removed from spiritual content. It also asks ontological questions about what psychedelics are, which in

turn defines what they are used for and by whom (Dean, 2019; Gebara, 2023; Luke, 2023). The previous research period from the 1950's onward was referred to by some as an "archaic revival" (McKenna, 1991) due to the re-connection of western cultures with psychedelic use, which has been described as a universal spiritual or ritualistic phenomena dating back to prehistory (Mckenna and Riba, 2016, Winkelman, 2011; 2018).Whilst pre-history Europe is beyond the scope of this research, to mention that indigenous peoples of Europe likely used 'psychedelic' plants is relevant when thinking of shared-practices common amongst human cultures globally. The *term* 'Psychedelics' itself is in contrast is a new term (1957) and developed within a psychiatric context roughly translating to 'mind revealing' (Carhart-Harris and Goodwin, 2017) and applied psycho-active substances both natural and synthesised, that induce 'non-ordinary mental states' by profoundly altering an individual's sensory perceptions, mood, emotions, and cognitions (Mckenna and Riba, 2016).

The discourse around the use of language to describe these substances therefore is currently a topic of ongoing debate amongst researchers as the terms used can denote intention of usage and interpretation (Letcher, 2013), mechanisms of action (Gerbara, 2023), world view and an implied ontology (Letcher, 2013; Gerbara, 2023). One of the key difference between the traditional bio-medical description of a pharmacological "medicine" and psychedelics, is that medicine has historically been taken as a 'passive agent', meaning that it will independently work on a person's bio-chemistry, whereas a psychedelic compounds are being described as an 'interactive process' (Timmerman et al., 2023). This 'interactive process' involves many aspects which are in the early stages of being understood, (and is one of the foundations for the current research project) but which consistently involve engagement with thoughts, visions, memories, feelings, bodily experiences, as well as spiritual or mystical experiences. This interactive process is in the process of being constructed within current psychological understanding, yet there is currently no ontological understanding within the psychological

literature of spiritual or mystical experiences, independent of psychedelics (Piedmont, 2009, 2022). Psychedelics, and in particular, Ayahuasca, represent one of the most reliable and repeatable methods of experiencing mystical or spiritual experiences, which also lends to the prospect of understanding these aspects with the addition of physiological and neurobiological data (Timmerman et al., 2023).

1.11 Ayahuasca

Ayahuasca is the name commonly given to a psychoactive brew that has been consumed in the amazon region for millennia (McKenna & Riba, 2016). Its name originates from the Quecha language with “*aya*” referring to or translating as ‘a deceased person, spirit, or soul’ and “*huasca*” meaning vine (McKenna and Riba, 2016). Interpretations or translations are often represented as “Vine of the Soul, or Vine of the Dead” (McKenna and Riba, 2016). Ayahuasca is made by boiling or brewing two plants together; the leaves of the green shrub *Psychotria viridi*, in combination with the harmaline containing vine Banisteriopsis Caapi. In combination they contain both the psychoactive ingredient N-dimethyltryptamine (DMT) and a monoamine-oxidase-inhibiter (MAO-I) which temporarily suspends the body’s enzymes, rendering it orally active. The brew, which is bitter to the taste, is drunk, with the quantity varying from an ‘espresso size’ amount to a large bowl-full, and may be taken once or multiple times during a session or ceremony (providing no additional ingredients have been added such as Datura which can be found in some traditional practices in the Amazon, and can significantly increase toxicity profile).

Traditional uses of Ayahuasca

Ayahuasca use varies on region and culture but there are different ways in which it is used (Winkelman, 2011). The first, and oldest, is the ceremony of indigenous peoples where a leader such as shaman may drink, with purposes for healing, magic, rite of passage and pre-hunting

ritual (Winkleman, 2011). These can be found across the Americas and may be referred to as shamanic practices. The second are Santo Daime Churches. These are found predominately in Brazil where a blend of catholic ‘church service’ hymns are sung with the use of Ayahuasca as a sacred sacrament referred to as syncretic religious use. Thirdly, is the so-named ‘neo shamanic’ approach. This is typically in ceremony form, and may include a blend of traditional indigenous practices, catholic traditions, as well as modern practices such as the use of western musical instruments or even pre-recorded music. It is also being integrated with some forms of clinical practices referred to as so called “hybrid shamanic psychotherapeutic rituals” (Luke, 2023).

Effects of taking Ayahuasca

Ingestion through drinking has a range of ‘psychedelic’ effects which typically last between 4-6 hours. Due to the variety of effects and experiences, relevant literature will be presented under the following headings; biological, psychological, ecological and spiritual, though there are many overlapping aspects which will be discussed further.

Physical effect and biological models of understanding

The effects of Ayahuasca typically begin between 30 minutes to one hour after ingesting it, though this can vary. A range of effects are often initially reported, including an array of visual experiences and bodily sensations. Vibrant and complex geometric ‘mosaic-like’ patterns are commonly reported, with descriptions matching those of early anthropology literature of shamanism (de Araujo et al., 2012). Ordinary visual experience is replaced by these images which can be ‘seen’ with eyes open or closed. Images are often reported as being both chaotic yet highly organised which ‘self-assemble’ into relatively stable yet almost ‘impossible’ geometric images (Timmerman et al., 2023). Neuroimaging studies demonstrate changed

activity in Seroton-2A receptor sites found in the primary visual cortex, and it has been proposed that the structure of the brain may be being revealed, along with mediated access to the fractal assembly of nature (Timmerman, 2023). Other experiences such as synaesthesia , hearing colours or seeing sounds, after reported, as well as intense bodily sensations such as nausea, as well as feelings of vibration going through the body (McKenna, 2004).

McKenna and Riba (2016) first proposed a model in which ‘ayahuasca reduces ‘top-down’ constraints and facilitates bottom-up information transfer’. The mechanism proposed was simultaneously enhancing neuronal activity whilst reducing higher-order cognitive control. They proposed that the process of disrupting usual neural hierarchies, enabled explorations of new narratives (McKenna and Riba, 2016). Cahart-Harris’s 2019 REBUS model proposed something similar (though with psilocybin), which was termed as the ‘anarchic brain’ in which greater ‘degrees of freedom’ are observed resulting in new ways of conceiving the self and view of the world (Cahart-Harris, 2019). This idea was further developed by Timmerman et al., (2023) who’s neuroimaging research showed increase entropy or hyper connectivity between brain regions, particularly in the neo-cortex, which has been shown to be key in meaning making, and ‘story-telling’ parts of the brain that assist in constructing worlds of experience. This is in keeping with proposed Neurobiological models of spirituality which have been put forward (from near death experience, Kundalini yoga, holotropic breath work) that spiritual experiences are the result of changes in the brain that occur during moments of heightened emotion, ‘peak states’ or altered states of consciousness, or during meditation states. The proposed changes often involve alterations in the activity of brain regions, such as the prefrontal cortex (meaning making, self-narratives) or the amygdala (stress and emotional regulation), or changes in neurotransmitter levels, such as spontaneous spiritual awakening or spiritual crisis (Clarke, 2010). Psychedelics are proposed as a tool to provide hyper-connectivity in which the individual can use to interact with their own personal ‘psychology’

(Timmerman et al., 2023) (as well as perhaps larger ‘collective’ experiences). For example it has been proposed that DMT (the active compound in Ayahuasca) may both increase serotonin activity as well as enhancing neuroplasticity across the dendrites which may have significant implications for ‘new learning’ (Timmerman, et al., 2023).

One of the aspects which has been made clear from both imaging studies and qualitative and subjective experience, is that purely reductionist, biological or pharmacological perspective is not enough to explain all aspects of experience. For example there are current pharmacological RCT studies which investigate implications of pharmacological effects on symptom reduction, whilst almost completely overlooking participants subjective experiences (Dos Santos, 2021). However, one of the aspects that shapes and defines a psychedelic experience, is the interaction and meaning-making of the experience both in ‘real-time’ and afterward. One of the reported phenomena, in particular is that the ‘Cartesian observer’ (Letcher, 2013) remains online despite the ‘disruption’ or alteration to most other senses.

1.12 Psychological Experiences

As might be expected from the wide range of Biological processes occurring after consuming Ayahuasca, there are a wide range of psychological experiences that are reported. These can include changes in perception including somatic, cognitive and emotional, which can produce a range of psychological outcomes useful for therapeutic use. These include changes in beliefs and worldviews about the self, others, and about reality, as well as a wide range of cathartic cognitive and emotional processes, often leading to ‘new insights’ (McKenna, 2004). Whilst experiences can be frightening, overwhelming, or euphoric, it is often reported that the Sensorium or the Cartesian theatre (Letcher, 2011) remains unperturbed, meaning that the ‘observer’ remains ‘intact’, as opposed to being in a state of ‘delirium’ which is marked by a complete ‘loss of awareness’ or ‘losing touch with reality’. As such the experience is not

passive, but one in which the participant ‘engages’ with the wide range of experiences or processes that are occurring (Timmerman et al., 2023).

Psychological Mechanisms

It is now reported that both the quality of experience, and degree to which a person engages with this process and integrates these is important for producing change (Timmerman et al. 2023, Perkins et al., 2023). One of the most extensive research studies to date is the recent Global Ayahuasca Project (GAP) which is international cross-sectional study by Sarris *et al*, (2021) examining wellbeing and mental health of approximately 11,000 Ayahuasca consumers. They found 78% of people reported an improvement in experiences of depression while 70% of those with anxiety reported that their symptoms were ‘very much’ improved. Though there is no one consensus or agreed upon psychological model to explain the effects often observed in relation to wellbeing, the following may offer targets for future interventions.

CBT model as explanation

Research has reported profoundly meaningful experiences that result in personal transformations that affect a broad range of personal emotions, cognitions and behaviours (Miller, 2004). Agin-Leibes et al., (2022) propose that psychedelics enhance psychological mechanisms such as reappraisal, and post-acute increases in psychological flexibility. Various psychological blockages and denials may enter awareness and become illuminated from multiple perspectives allowing the participants to gain insight into their maladaptive behavioural, emotional and/or cognitive patterns. Lyons & Carhart-Harris, (2019) noted more realistic forecasting of future life events after psychedelic use for treatment-resistant depression.

Experiential avoidance, in-keeping with a CBT framework

The efficacy of psychedelic-assisted therapies for mental disorders have been theorised to also largely be attributed to the lasting change from experiential avoidance to acceptance that these treatments appear to facilitate (Wolff et al., 2020). In a paper entitled- '*Learning to let go*' the authors propose a cognitive behavioural model of psychedelics method of action. They state:

There is mounting evidence that the positive long-term effects of psychedelic therapy are mediated by the quality of the acute psychedelic experience. Qualitative interviews with patients have shown that avoidance and acceptance are often central themes of their psychedelic experiences, and patients commonly report transient episodes of struggle with intense aversion (Wolff et al., 2020).

3rd Wave CBT models

Research by Soler et al (2016) suggested mindfulness as a possible psychological mechanism underlying impact of Ayahuasca. Results from their study found significant reductions in non-judging and non-reacting to inner experiences. Both indicate decreases in the tendency to be evaluative and judgemental. They suggest that 1) decentring 2) Imaginal exposure, and 3) exposure could be the 3 major forms of psychological mechanism (Soler et al., 2016). Sampedro et al. (2017) report increases in the capacity to observe thoughts and emotions in a detached manner and to reduce automatic negative judgement attitudes and inner reactivity (Sampedro et al, 2017), suggesting a possible synergy with pre-existing clinical psychological models of working. In keeping with this, has been findings of enhanced mindfulness capacities, reduced judgemental processing, inner reactivity and increased self-kindness (Sampedro et al, 2017). Other research reports increased sense of well-being, insights, feelings of apprehension and notably increased introspection and amplification of mental imagery (Palhano-Fontes et al., 2015) including visions and autobiographic emotional memories

(Dominguez-Clave et al., 2016). However, unlike CBT talking therapy where incremental steps are often necessary for new learning, it is often reported that the manner in which knowledge is gained by ‘intuition’ rather than logic (Soler et al., 2016).

Perkins et al., (2023) used qualitative data from the Global Ayahuasca Project (GAP) of nearly 11,000 participants, in over 50 countries, to generate a range of possible models of therapeutic action. Despite a wide variety of traditions, settings, and number of times consumed, a series of common processes or experiences were identified across the group (Perkins et al., 2023). They proposed a model with five key mechanisms of how Ayahuasca may impact wellbeing

1. Somatic effects
2. Introspection and emotional processing
3. Self-connection
4. Increased spiritual connection
5. The gaining of insights and new perspectives

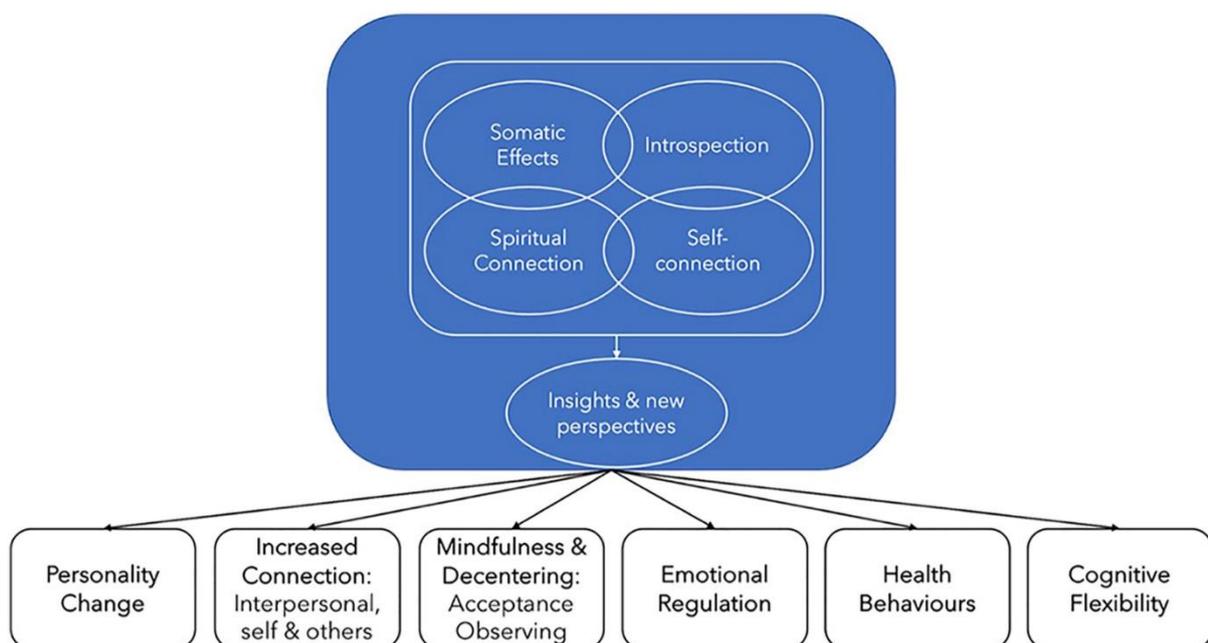


Figure .2 Perkins et al (2023) Global Ayahuasca model

1.13 Ayahuasca and the mystical or spiritual experience

As presented, Ayahuasca offers significant potential prospect as a therapeutic agent, though it also presents challenges to current models of psychological and pharmacological clinical working, partly due to a range of spiritual experiences that are often described (Cahart-Harris & Friston, 2019; Strassman, 2000), and a psycho-spiritual approach is recommended (Perkins et al., 2023).

Increased spiritual connection and awareness

Compared with other ‘classic’ psychedelics, Ayahuasca drinkers often report an emphasis on spiritual or ‘mystical’ experience, with a range of long lasting effects and implications (Davis et al., 2023). From the GAP study approximately 75% of participants (around 7,500) reported that they had experienced new insights or gained new perspectives relating to topics of higher power or sacredness (Perkins et al., 2023), of which approximately 90% reported had a positive effect on their lives (Perkins et al., 2023).

Spiritual Experiences/encounters

Steven Szara first reported encounters with entities, with Neuroscientist Rick Strassman corroborating these reported experiences during the 1990 clinical trials with over 100 participants (Strassman, 2000). Some of the reported phenomena during the ‘mystical state’ are in-keeping with traditional transpersonal constructs such as connection, transcendence beyond the self and contact with the sacred or numinous, however other experiences commonly reported are quite different from transpersonal or therapeutic NOSC. As such there is currently no scientific consensus, framework or ontology for the encounters people report with non-human intelligence, beings or ‘entities’ outside of religious or folkloric tradition or pathology.

Commonly reported phenomena include interacting with ‘spirits or entities’ such as ‘talking’ or ‘telepathic’ animals, communing with the spirits of plants, connecting with ‘the great mother’, as well as out of body experiences and encountering near death experiences (Kripner and Sulla, 2000; Luke, 2023). Interactions often feel very ‘real’ and meaningful, and often fit within archetypes such as serpents, angels and ‘elves’ (Luke, 2023) yet these particular encounters are often only mentioned briefly within current scientific studies that often aim to position Ayahuasca as a pharmacological agent, or psychotherapeutic tool. Some studies position psychedelics as pharmacological agents such as a recent RCT in Brazil, for anxiety noted: *we observed that most volunteers were reluctant to describe their subjective experiences*”, (Dos Santos et al, 2021). There is now an ongoing debate in the literature and the study of Psychedelics, especially Ayahuasca, whether spiritual or ‘mystical-states’ are phenomenological “side effects” of a ‘medication’ or whether they are in fact part of the fundamental therapeutic aspects of psychedelic treatment. To present what is currently understood about this area of research, a systematic literature review was undertaken which is presented in the next chapter.

Chapter 2: Systematic Literature Review

2.1 Chapter Overview

This chapter will focus on the systematic literature review, which will include a statement of research aims with relevant context, the search strategy and methodology, findings of the synthesis, followed by the current study aims.

To further understand what is currently known about Ayahuasca use and spiritual experiences, a systematic review of primary, peer-reviewed research was conducted. Given the novel nature of this research area, which is still in the early stages of scientific enquiry within the UK, the research aim was necessarily broad. The aim of the systematic literature review was; *What is currently known about reported spiritual experiences of Ayahuasca use?*

2.2.1 Search Strategy

Several pilot searches were made to obtain an initial estimate of quantity (and type) of data within selected bibliographic databases (November 2021-March 2022) in order to ascertain the viability of a systematic review. This was pertinent for a number of reasons. Firstly in accordance with drug scheduling laws relating to psychedelic compounds across the UK, Europe and North America, research has been on a 40 year ‘hiatus’ (Nutt, 2014; Cahart-Harris and Goodwin, 2017). The first high quality RCT study to research psychedelics in the ‘modern era’ was Rick Strassmans (2000) RCT using DMT. Within the field of psychedelic research this is seen as a scientific ‘bench-mark’ of modern scientific enquiry, in which systematic rigour to protocol, as well as ethical guidelines are in keeping within current scientific standard. As such the year ‘2000’ is widely regarded as being an accepted ‘cut-off’ date for psychedelic research, which is consistent with other reviews exploring psychedelic research (Nutt, 2014, Sessa, 2012).

The most appropriate bibliographic databases were identified via a variety of means. These included identifying previous psychedelic research published within the UK, consulting the supervisory research team, as well as running pilot searches of the selected bibliographies, available to the University of Hertfordshire. Scopus, (science, technology, medicine, social sciences, and arts and humanities), America Psychological Association (APA) and affiliated Journals, CINAHL (Cumulative Index to Nursing and Allied Health Literature), PubMed, MEDLINE, Psychiatry online.

Search terms were selected using a range of terminology commonly associated with the topic in question. These were extracted from previous literature, and in-keeping with previous systematic reviews on psychedelics. The search terms were selected to cover a range of usage or epistemologies, for example ‘*Ayahuas**’ originates from the Quechua language (native to the amazon), ‘*Daime**’ derives from Brazilian Portuguese (which may denote religious syncretistic use), and ‘*DMT*’ which references the psychoactive compound found in ‘Ayahuasca’ which is often used within secular, scientific literature. Similarly the same consideration was given to the experience derived from its use which may be referred to as ‘*Peak*’, ‘*acute*’, ‘*spiritual*’, ‘*religious*’, ‘*mystical*’, or ‘*mystical-type*’ covering a range of ontologies. ‘Boolean’ searches were used to allow for a range in spelling or misspelling.

The initial search strings used were:

ayahuasc* OR DMT* OR Dimethyltryptamine* OR Daime* AND Peak* OR Myst* OR spirit* OR religio* OR mystical experience* or mystical-type experience* OR mystical* OR acute-state* or subjective experience* OR Peak*

(The same search terms were used across all databases, though syntax was altered in accordance with individual bibliographic requirements such as “brackets”, “quotation marks” and ‘Boolean’ [*] requirements’).

This initial search yielded approximately 13,000+ papers. From a manual appraisal of abstracts it was identified that the majority of papers arose predominately from the abbreviation of “DMT” which overlapped with a number of alternative health and science-related terms (Dance/Movement Therapy, Digital Management Technology, Disaster management Team, Dimethyl Terephthalate and Dimethyltryptamine used within biological lab-based or non-human investigations). It was decided that as DMT alone (a component of, but differentiated from, Ayahuasca) was an as an exclusion criteria, it was decided to remove this from the search string. A second re-evaluation of exclusion criteria was also decided based on manual scanning of abstracts. This was to include UK studies only, (studies by UK affiliated authors, at least one in cases of multi-country collaboration) due to extensively broad context of literature which made quality criteria difficult given the widely varied contexts. One attempt to control for the number of contextual variables was to limit studies to those with strict methodologies such Randomly Controlled Trials (RCT’s), however this yielded 2 studies in total, within the context of the search criteria. It was therefore deemed necessary to broaden the search to include other empirical methodologies (RCT’s, field studies, questionnaires, and observational study) but to use the country of origin to control, as far as possible, contextual variables as described above. The following revised search terms were used:

ayahuasc* OR huasca* OR Daimon* AND Peak* OR Myst* OR spirit* OR religio* OR mystical experience* or mystical-type experience* OR mystical* OR acute-state* or subjective experience* OR Peak*

A total of 364 papers were identified from the search. Below is the table of inclusion and exclusion criteria that was used to determine eligibility for research papers.

Table 5. Inclusion and Exclusion Criteria

Inclusion	Exclusion
Available in English	Not available in English
UK based research or affiliated research institution	Not-UK affiliated researchers or institutions
Published after 2000	Published prior to 2000
Peer reviewed journal	Non-human studies
Ayahuasca use as the main investigation	Multi-substance/more than one psychedelic being investigated
Empirical study	Extracted DMT and NOT Ayahuasca
	Theoretical or review

The search results were exported from each bibliographic database to note management software and once compiled screened for duplicates. Titles and abstracts were screened according to the inclusion/exclusion criteria, the remaining articles were then assessed.

Bibliography Database	Number of articles
APA PsycArticles,	1
Ebscohost	1
PubMed,	83
CINAHL	29
Scopus	182
PSYCHIATRY ONLINE	0
MEDLINE	68

A total of 364 titles were identified. 17 duplicates were removed due to duplication. Out of the 346 remaining 307 were excluded by reading the Titles and abstracts and appraising them in accordance with the inclusion and exclusion criteria. A total of 39 papers remained and were scanned in full and selected or excluded based on the above criteria. Of these only, five articles met the criteria for inclusion in the review. The reference lists of the remaining articles were

then hand-searched in order to identify any further articles that may have not been identified in the search. A number of articles were identified using both references and google scholar, however after accessing these and scanning, they did not meet inclusion criteria.

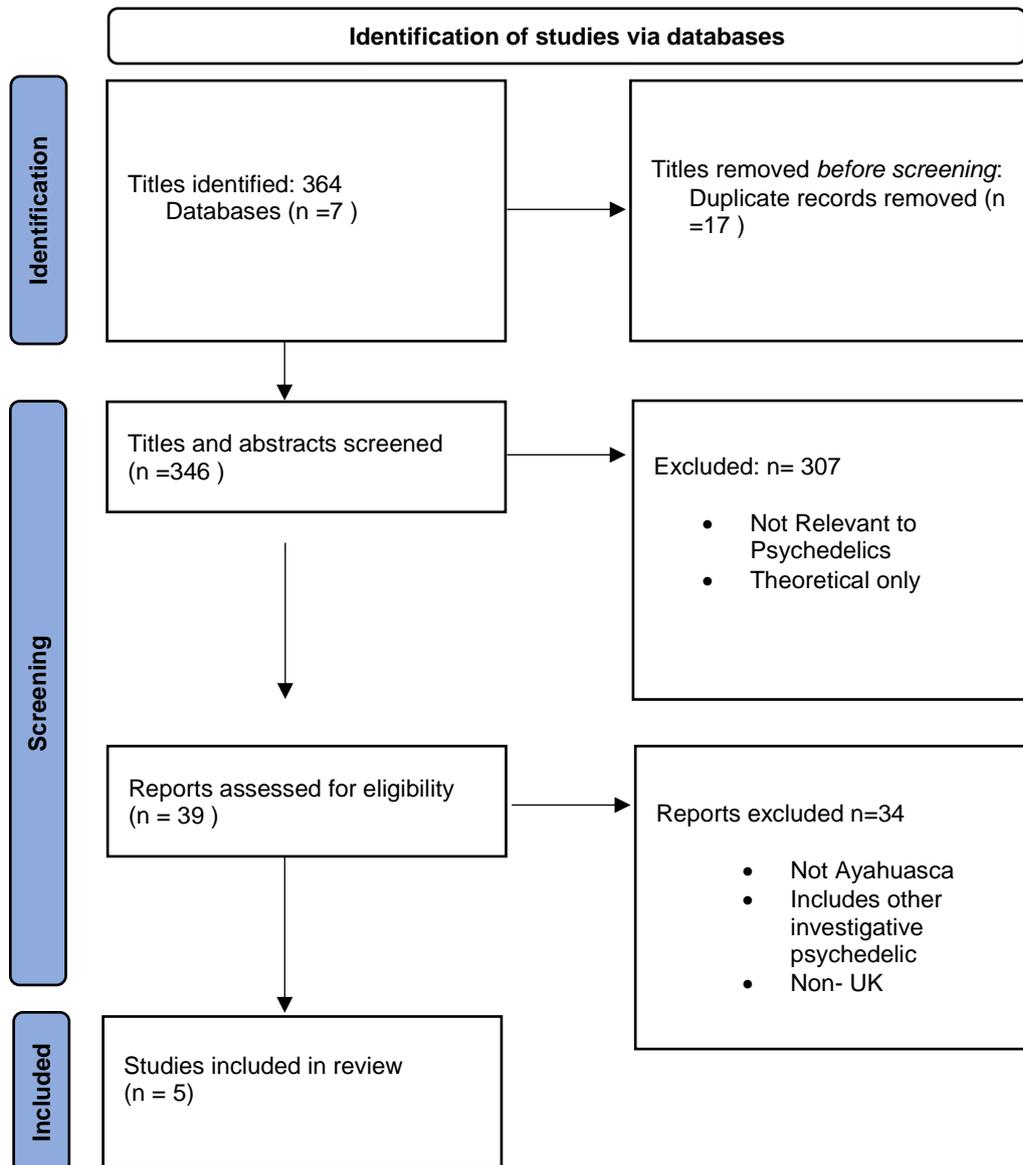


Figure. 3 PRISMA flow diagram of record selection process

Quality assessment

The studies included within this review were both qualitative and quantitative. The decision to include different methodologies was taken in part to account for the novelty and therefore sparsity of pre-existing data in the area of interest. Given the limited pre-existing data, it is acknowledged that the application of the quality assessment process may also have limitations within this respect. Two main quality assessments appraisal tools were used. The ‘Big Tent’ (Tracey, 2010) quality assessment tool was selected as the studies presented with differences in epistemological, and potentially ontological approaches, and the Big Tent approach had been demonstrated to be both flexible, whilst offering specific quality criteria (see appendix F). In addition, the Critical Appraisal Skills Programme UK (CASP) checklist was used in accordance with cross sectional and observational studies. The CASP system can be used to determine the quality of a study and include the following criteria; A) What are the reported results?, B) Are the results of the study valid? C) Will the results contribute locally and meaningfully? C) Is the study methodologically sound?

2.3 Overview of the literature

A total of 5 papers have been included in the literature review: 3 Quantitative papers which were conducted using a range of different questionnaires, and two qualitative studies conducted using semi-structured interviews. A summary of synthesised themes will be presented followed by a critical evaluation and implications for clinical research.

Table 6. Selected Papers following the Systematic Literature Review

Author (S) Year Publishes,	Title of Paper	N of Part	Aim, design, Methodology	Analysis	Results and Conclusions	Strengths and Limitations
1 Bouso,, Pedrero-Pérez, Gandy, & Alcázar- Córcoles. (2016)	<i>Measuring the subjective: revisiting the psychometric properties of three rating scales that assess the acute effects of hallucinogens</i>	n=158	To explore the psychometric properties of three questionnaires. of subjective effects of hallucinogens. 1. Hallucinogen Rating Scale (HRS), 2. Mystical Experience Questionnaire (MEQ), and the 3. Addiction Research Centre Inventory (ARCI)	Quantitative (factor analysis)	results not congruent with the theoretical proposals from other studies although these predominantly used psilocybin (magic mushrooms) where this study used Ayahuasca	Thorough investigation of validity of commonly used psychometric tests. Strong rationale for the need to conduct this research. Transparency and commitment to rigour evident throughout. Limits of study-
2 Netzband, Ruffell, Linton, Sang and Wolff (2020)	<i>Modulatory effects of Ayahuasca on personality structure in a traditional framework.</i>	n=24	Assesses the impact of Ayahuasca on personality in a traditional framework cross cohort, field study, observational repeated mixed measures design	Quantitative (mixed ANOVA)	Ayahuasca retreat in a traditional framework adapted for Ayahuasca tourists led to significant reductions in neuroticism, which remained stable at 6-month follow-up. Additionally, MEQ scores were found to correlate with reductions observed in neuroticism.	Strong study design and implementation. Made use of between group analysis which is not widely done within field research. Relatively small sample number and selection bias makes it difficult to gauge ability to generalise over wider population.
3 Dean, (2019)	<i>The enchanted snake and the forbidden fruit: the Ayahuasca 'fairy tale' tourist</i>	n=63	Prospective, Interview based, qualitative	Qualitative	Problematic experiences on return to country of origin, including hiding experiences for fear of stigma, and problems integrating experiences leading to increased feelings of disconnect and anxiety	Approaching topic from a less researched perspective, detailed ethnographic accounts. Limited generalisability. Use of metaphor within premise of the project perhaps limits interpretation of new narratives/participants are fitting within researchers pre-conceived metaphor.
4 Gonzalez, Cantillo, Perez1, Carvalho, Aronovich, Farre, Feilding Jordi, Obiols and Bouso (2020)	<i>The Shipibo Ceremonial Use of Ayahuasca to Promote Well-Being: An Observational Study</i>	n=200	Longitudinal- Follow up study (1 year) measuring wellbeing of Ayahuasca participants 1 later	Quantitative	Improvements were noted across 5 measures after a period of 1 year, with statistical significance.	Use of multiple measures considered a strength by some, or a criticism that results are post-hoc.
5. WOLFF, RUFFELL, NETZBAND and PASSIE (2019)	<i>A phenomenology of subjectively relevant experiences induced by ayahuasca in Upper Amazon vegetalismo tourism</i>	n=9	Explore subjective experiences of important to 9 Ayahuasca users experience. Semi-structured narrative analysis	Qualitative content analysis (QCA)	Authors suggests that psychodynamic processes, offer an explanation for Resolution of spontaneous activation of emotional conflicts.	Rich detailed subjective accounts capture a broad account of areas for further research. Detailed transparency of the research process. Limited by number of participants and selection bias from a single Ayahuasca retreat. Use of psychodynamic models as

Some participants attributed symbolic meaning to the visionary content, which was more likely to take place in Those who had specific therapeutic motivation for attending the ceremony. Both setting and expectations of the participants in native wisdom could may have influence on phenomenology such as entity encounter and personal messages.

explanations of processes, which have been criticised for broad terms and lack of specificity.

2.4 Synthesis of Themes

This review aimed to identify, evaluate, and summarise findings from relevant research relating to spiritual experiences of Ayahuasca use, which is a new and emerging field of research in the UK. Guidance was drawn from Siddaway, Wood and Hedges (2019) methodology to complete a synthesis of the data where a variety of methods have been used. Firstly the collation and appraisal of the “*how, why, and when*” (Popay et al., 2006), of the research was collated (presented in table 5.) before data from individual studies was combed and compiled in a way to be able to draw individual study comparison and between group comparisons to collate larger narratives of the pooled research. It is acknowledged that due to the severely limited number of studies retrieved, the ‘power’ and conclusions that may be drawn from this synthesis are limited, and acknowledged as being part of ‘ground level’ research which remains appropriately tentative.

2.4.1 Theme 1- The psychedelic or Mystical experience may be overlapping terms

Using both quantitative and qualitative data the first theme that emerged was that the term ‘psychedelic experience’ is used to denote a variety of experiences that are typical really only within the ‘psychedelic experience’. This included a range of physical, psychological, and mystical-type experiences. It can often be a measure of ‘effect’ or strength compared with ‘micro-dosing’ where the psychedelic experience (the above mentioned effects) may not be present. In Bouso et al., (2016) paper they used the Mystical Experience Questionnaire (MEQ) and Hallucinogenic Rating Scale (HRS) to test reliability of psychometric properties testing validity of constructs against people’s experience of Ayahuasca use. They found that in fact the MEQ has overlapping factors with the HRS, and that the reporting of more specific MEQ may in fact be a more specific measure of experience. This theme is also found in Wolf et al., (2019) qualitative study investigating phenomena of Ayahuasca use in Peru. The authors noted that

the presence of greater ‘psychedelic phenomena’ such as entity encounter, and noetic experiences, may be linked to ‘emotional breakthrough’ often resulting in change, which they conceptualised using psychodynamic theory (of bringing the unconscious ‘to light’) and that this was function of the psychedelic experience, which contains greater presence of phenomena that may be considered ‘mystical’. Netzband et al., (2020) also concluded that scores of MEQ correlated to greater reduction in ‘neurotic traits’ such as low mood and anxiety. Dean (2019) had a very divergent finding to this, which at first did not seem compatible with the other studies. Dean (2019) conducted a field study over 2 years, with 63 people who had consumed Ayahuasca. The author presents findings as participants looking for a ‘fairy tale’ which they loosely defined as an ‘experiential and transformative encounter, involving magic, and spirits’. The positionality was very different from the other papers, which used the lens of consumerism, more closely linked to “psychedelic tourism”. They reported finding that the so called ‘fairy-tale’ “collapsed” on follow interviews with participants. Participants were reported to be left feeling isolated, confused, and in some cases abandoned. What was interesting about this study was that for the participants the criticism was not that they did not receive an experience of ‘magic and spirits’ or the ‘psychedelic experience’, as in many instances, it was the very presence of entities, that was problematic, and thus the participants concluded that the psychedelic effect and the ‘mystical experience’ was present, but the outcome was not what they were seeking. What this paper also revealed was that all of the participants had hidden these experiences to friends and family.

2.4.2 Theme 2- Integration of phenomena may be key in understanding effect (including increase in distress)

Dean (2019) finding is to date substantially divergent from most other research into psychedelics. However, it highlighted a hinted at, but under researched domain of the

psychedelic outcome of integration. Integration refers to how a person makes sense (or does not) of their experiences, and how they may incorporate aspects of this in 'day-to-day life'. Psychedelic studies are largely cross-sectional and often focus on the psychedelic experience itself. What Dean (2019) found was in contrast to other studies, that the presence of psychedelic experience or mystic experience may mediate change. Instead there was rich descriptions of phenomena, but that these 'faded' as time went on often leaving people feeling isolated or abandoned, and as noted, they recorded that all participants reported hiding these experiences from social group or peers after returning home. This study was significant (and nearly excluded based on aspects of the "Big Tent" quality criteria- see Appendix E) as it hints at both integration and lack of framework. Participants were (positioned as) consumers looking for an interactive "fairy tale". In contrast Netzband et al., (2020) found that using trait questionnaires, participants in the active Ayahuasca group showed a significant reduction in "trait neuroticism" which was stable over 6 months. Within this trial there was a specific indigenous neo-shamanic framework that also incorporated elements of 'modern clinical working'. Whilst difficult to make broader statements (n=24) it is possible that this may be associated with an 'integrated' approach. Gonzalez et al., (2020) Conducted a follow up study of 200 Ayahuasca drinkers, 1 year later. They found an improvement on a wide range of wellbeing measures. This was also within the same Indigenous framework (though not necessarily the same retreat) as the Netzband et al., (2020) trial, and may support the specific framework received there, which is what the authors concluded.

2.4.3 Theme 3 - Motivation – a mediator of commitment?

One of the observations noted Gonzalez et al., (2020) was that the majority of participants had spiritual motives (66% of participants), as opposed to therapeutic motives. This theme of motivation arose in all studies (though converged least in Bouso et al., 2016). Dean (2019) reported extensively on participants (n=63) difficulties in the months following the ceremonial

use of Ayahuasca. This paper outlined motives as consumer driven, for people looking to “live a fairy tale” or to find an ‘immersive experience’ where they could take part in a ‘heroic quest’. One of the reasons this paper was nearly excluded was based on the “Big Tent” criteria (Tracey, 2010) as appraised for authenticity, and sincerity. However on reflection the author, (though perhaps biased in their positionality without much reflection of this) was in fact accurately capturing a lack of authenticity or sincerity of the participant’s motives. When compared to the outcomes of the other studies, this paper was vastly divergent, and what was highlighted was that this may also reflect the motivation of the participants. One interpretation of this study in comparison with the other four, is that participants reported wanting a ‘consumer experience’. Consumer experience is often associated with passivity. Psychedelic research has begun to highlight the importance of the experience not as a passive one, but as a process of engagement and interaction (Cahart-Harris, 2019). Wolf et al.,(2020) concluded from their study that therapeutic motivation may be a factor in experience of Mystical or psychedelic phenomena experience, which in turn, they conclude, may mediate reported change. However, based on this review (though very tentatively) it could be a possibly that motivation and commitment may be a mediator in willingness to integrate experiences. This could be argued as a contributing factor to the finding of high sustained improvement over one year later Gonzalez et al. (2020) with spiritual motivation reported as being a factor. Netzband et al., (2020) found that the active group had a greater trait reduction in neuroticism 6 months later, compared to the control, which may suggest that both motivation and psychedelic or mystical experience may be important in outcomes.

2.4.4 Limitations of this systematic literature review

This SLR is potentially the first of its kind (that the author is aware of), and as such it opens a discussion about broader themes and implications within the research. It is important to note that due to the recent re-emergence of psychedelics, and Ayahuasca, within serious scientific

enquiry, the data and scope of literature is currently severely limited. A gold standard of clinical SLR is to use data from Randomised Controlled Trials. At the time of writing there had been only 2 completed within the last 10 years, neither of which were conducted in the UK. Initial pilot searching, it was considered to potentially use the 'grey literature' however, a pilot appraisal of the literature based on the Quality appraisal tools of CASP and Tracey (2010) found the quality and rigour to be insufficient. It was therefore decided by the author and the research team to use a much smaller sample of research than would ordinarily be used for a Systematic Literature Review, but to ensure that the papers that were selected met the standards for quality, rigour, richness and sincerity as measured using the CASP (UK) and Tracey 'Big Tent' (2010) appraisal criteria. One additional piece of reflexivity is that since completion of this SLR between 2021- 2022, there has been considerable research conducted, at an unprecedented rate (especially after the lifting of COVID-19 restrictions) the author therefore acknowledges this burgeoning field of research, and as such more specific inclusion and exclusion criteria might now be applied, perhaps concentrating on RCT's (if available).

2.4.5 Implications

With any new field of research interpretation must remain tentative, but may be useful in highlighting areas for further research. In this case the author proposes the following areas for further research:

- 1) Understanding the mystical experience of Ayahuasca and its perceived outcomes on wellbeing.
- 2) Understanding the relation between motivation for seeking Ayahuasca, and aspects related to commitment of integration.
- 3) The process of integration of experiences; what helps and what hinders this process

Lastly, there appears to be a need to focus on long-term follow up and integration or lack of integration, which might be limited by selection bias of researchers and participants willing to discuss their experiences.

2.5 Rationale for the current study

Based on the literature to date participants who use Ayahuasca often report a psychedelic or mystical experience, which are both varied and contain uniquely personal content, and that these may have an implication or associated outcomes of health that have been reported such as reduction in ‘trait neuroticism’ such as low mood and anxiety (Netzband, et al., 2020). In addition it has been identified that lack of ‘mystical’ experience, or a lack of possible integration of this experience into ‘daily life’ (Dean, 2019) may be a source of distress, and points to possible convergence or overlap within spiritual (non-psychedelic) studies (Sandage et al., 2020) though these fields have largely remained separate for a number of reasons previously outlined.

2.6 Aims of the current research

The aims of this current research study is to explore and better understand the experience of wellbeing and spirituality for UK based participants who use or have used Ayahuasca. In order to do this a number of open questions are proposed;

- What makes this a spiritual phenomenon for participants?
- What aspects of wellbeing are experienced or effected from Ayahuasca use? (Non-directional).
- To explore dynamics between spiritual phenomena and aspects of wellbeing if reported.

Chapter 3: Methodology

3.1 Chapter Overview

This chapter will provide details of the study design, the methodology used in executing the study, as well as outlining broader reflexive processes and considerations when constructing this project. Firstly the rationale for selecting a qualitative, IPA approach will be provided. This will be followed by details of the study which will include design, study recruitment, participant selection, data collection, and method of data analysis. Finally, details will be presented relating to ethical considerations that were required when designing and conducting this research, as well as additional ethical considerations required when presenting findings.

3.2 Study Design

Choosing the methodology

In the initial stages of the study design, both qualitative and quantitative research methods were considered however qualitative methodology was considered most appropriate for the area of research. Qualitative methodology is often employed in order to gain a deeper understanding of complex phenomena that cannot be easily quantified or measured (Harper, 2011). It allows the researcher to explore the nuances and complexities of an individual human experience in a way that quantitative may not be able to (Harper, 2011). For example, when attempting to capture nuanced subjective experiences, such as emotions, attitudes, beliefs and the way in which people experience the world around them, qualitative methodology may be indicated (Harper, 2011). This was a particularly relevant consideration when attempting to understand experiences that may be both 'ineffable' such as spiritual experiences (Piedmont, 2004), and deeply personal. Conducting semi-structured interviews allows an opportunity for the researcher to build rapport and trust with research participants and gain a deeper understanding of their experiences (Smith, Flower and Larkin, 2009). Lastly, whilst there are quantitative

tools which have been developed for measuring spirituality such as the ASPIRES and Numinous scale (Koenig, 2005; Piedmont, 2009; Piedmont and Wilkins, 2019), and whilst progress is being made regarding standardisation (Piedmont, 2009, 2019) there is currently no overarching ontology for the psychology of spiritual experiences (Piedmont, 2019) and given the additional complexity and relative novelty of psychedelics, a qualitative design was chosen as the most suitable research method in gaining a deeper understanding of people's experience of wellbeing and spirituality within Ayahuasca use.

Selecting Qualitative methodology: IPA

Selecting the most appropriate qualitative methodology was carefully considered. The qualitative methodology selected for this study was Interpretative Phenomenological Analysis (IPA). IPA has its roots in phenomenology, a philosophy that emphasizes the study of subjective experience (Alase, 2017), and hermeneutics, which places emphasis on the process of interpretation of experience (Sloan and Bowe, 2014). IPA aims to understand how participants make sense of their experiences and how their experiences relate to their broader life contexts and cultural backgrounds (Alase, 2017). The researcher aims to interpret the participants' experiences by exploring the meanings and significance they attach to them (Sloan and Bowe, 2017). IPA is particularly useful when examining topics which are complex, ambiguous and emotionally laden (Shaun and Smith, 2014), and that are difficult to measure using quantitative measures (Harper, 2011). The small sample size of IPA studies enables the researcher to read the participants' accounts on a 'micro-level', which affords much greater analysis to nuanced understanding particularly of 'elusive' experiences or 'encounters' (Smith, Flowers and Larkin, 2009). IPA encompasses a number of core aspects in order to achieve this.

Ideography

An idiographic approach is concerned with exploring an individual's unique experience or phenomena in depth, rather than seeking to understand it in more generalisable terms or principles (Smith, Flowers and Larkin, 2009). In order to do this a greater amount of depth and detail is required to explore complexity and richness of chosen experience. To make thorough exploration feasible, smaller samples are necessary which may include a single case study. To this end, careful, purposeful sampling with greater emphasis on homogeneity of experience is preferred (Smith, Flowers and Larkin, 2009). This method is beneficial when exploring topics or subject matters where there is limited data already known, with the aim to understand both individual experiences as well as making sense of between group experiences (Smith, Flowers and Larkin, 2009). Semi-structured interviews are utilised to obtain this information where rapport and trust can be built through authentic curiosity of the researcher, demonstrating *sensitivity to the topic*. This is crucial in order to gain 'access' to depth and richness when exploring dynamic of and complex topics (Smith, Flowers and Larkin, 2009).

Hermeneutics

The term Hermeneutics is derived from the Greek word "*hermeneuein*," which means "to interpret" or "to explain." (Sloan and Bowe, 2014). IPA methodology maintains that all communication involves interpretation which is informed by individual and wider socio-cultural perspectives and experiences (Smith et al., 2009).

Double Hermeneutics

The Double Hermeneutic process refers to 'interpreting the participants' interpretation of their experience' (Smith, 2015). This means maintaining awareness of hermeneutic approach and interpreting data cautiously. Maintaining awareness and reflexivity that these interpretations are themselves subject to the construction influenced by the researchers experiences. Whilst

attempts to minimise biases are upheld, explicit reflexivity is utilised when making interpretation in order to *maintain transparency* (Smith et al., 2009).

Consideration of other qualitative methodologies

When selecting qualitative methodologies there is no strict “right or wrong”, though there are differences that make certain approaches more ‘suitable’ or more ‘justifiable’.

Narrative Analysis

Narrative analysis focuses on storytelling and narrative construction- how a person ‘creates a story’ of their experience and bringing ‘order to disorder’ (Murray, 2000). It examines how narratives influence aspects such as thoughts, feelings, identity formation, and meaning-making for individuals and groups (Murray, 2000). This approach was initially considered as a possible qualitative approach, however it was considered less suitable for two key reasons. The first is that individuals may have had just one experience of Ayahuasca only. Narrative analysis is often focused more on the ‘chain of events’ of an experience usually over time. With this in mind it was reflected on that participants who have used Ayahuasca may not have yet developed a story or integrated their experience into a narrative form. Particularly due to novel and complex subject matter, which often includes ‘ineffable’, or hard to describe components, including sensory experiences it was felt that Narrative approach was less suited than IPA.

Thematic Analysis

Thematic analysis is a qualitative research method used to identify, analyse, and interpret patterns or themes within a dataset (Braun and Clarke, 2014). It involves systematically organising and categorising qualitative data to gain insight into the underlying meanings, ideas, and experiences expressed by individuals or groups.

Discourse Analysis

Discourse analysis uses both spoken and written language to focus on the way that language itself is used in social contexts, and it is used to create meaning, shape social interactions, and construct identities and power relations. Within this methodology the emphasis is more on the communicative interaction as the “unit of analysis” taking a more social constructionist approach (Smith, Flowers, Larkin, 2009). With IPA the method uses a hermeneutic, ideographic and contextual approach, which was determined to be a more appropriate method in relation to the aims of understanding the phenomena being investigated, as far as possible.

Grounded Theory

Grounded theory was considered as a possible method. There was concern that due to prevalence of participants in the UK, it was not known if this would be a feasibility to meet saturation. Recruitment numbers of participants is both an ethical, and methodological consideration in determining feasibility of the study, which given the absence of prevalence data, it was felt this may not be feasible, and therefore not-ethical. It is hoped that following this study, grounded theory could be considered in the future.

Limitations of IPA

Interpretative Phenomenological Analysis (IPA) has received both praise and criticism as a qualitative research methodology. Small sample sizes limits the generalisability of findings, and limited scope to be able to make inference about broader social patterns. Lack of transparency: it has been argued that IPA can be overly subjective, and may lack transparency in terms of how the researcher interprets the data, or that it is overly interpretative, with researcher bias. This calls in to question reliability and validity of findings as it can be difficult to establish reproducibility of findings.

Procedures

Ethical Considerations

This sections covers how ethical approval was obtained and the ethical considerations required when designing and implementing this research. Prior to commencement of any research protocol procedures, ethical approval was applied for. Ethical approval for this study was obtained by The University of Hertfordshire Ethics Committee in November, 2022 (Appendix, A).

Development of Interview schedule

The first draft of the interview schedule was developed using the current literature, the supervisory team, as well as meeting with people with lived-experience. This included both persons who had attended an Ayahuasca ceremony (participants) as well as a Neo-Shaman (practitioner). Other researchers were also contacted, and in addition, the lived experience of the researcher was utilised to ensure *sensitivity of context*. Attempts were made to contact traditional indigenous peoples from both Brazil and Peru, via a number of different methods. However, the logistics were outside of the scope of the research and will be further discussed within reflexivity. Participants were helpful in ensuring sensitivity to context. The Research team was also utilised to ensure correct implementation of methodological and philosophical ‘spirit’ of IPA was adhered to.

Piloting the Interview protocol

In accordance with an IPA approach (Smith, Flowers and Larkin, 2009) an interview protocol was developed. An interview schedule is a range of open ended questions designed to illicit detailed and nuanced descriptions of the phenomena being explored, and the meaning individual make from the area of investigation .The initial interview protocol was designed in collaboration with both the research supervisory team, and consulting individuals with lived experience within this field. This included individuals with a range of different experiences

from participants, facilitators or ‘neo-shamans’ as well as researchers. The interview schedule was then piloted with one participant, who provided feedback. Following these processes a number of revisions were made. These included beginning with participant definitions of key concepts, ensuring the questions remained open ended and as ‘neutral’ as possible, with no ‘directional’ premise’s, changing the order of the questions to gain wider context and give a chance to build rapport before asking more personal questions. Following the feedback additional adjustments were made to reduce the number of ‘secondary’ questions to allow more time to expand primary phenomena.

Participants

In order to ensure recruitment matched the study aims, an initial inclusion and exclusion criteria was created.

Table 6 Inclusion and exclusion criteria

Inclusion	Exclusion
Over 18	Under 18
Currently living in the UK	Not Based in UK
Fluent in English	Not fluent in English
At least 1 legal experience of Ayahuasca	Recreational or illegal use
Reports experiences relating to spirituality and wellbeing (as self-defined)	Not able to share experiences
Willing to talk about experiences	Seeking study for ‘therapeutic’ support Ayahuasca use in combination with another substance

Recruitment

A purposive sampling approach was used to recruit participants that would represent a homogenous sample. Careful consideration with phrasing and terminology was used when developing the adverts not to be too ‘prescriptive’, medicalised when defining terms such as spirituality or wellbeing, whilst also presenting the study as a serious attempt at scientific inquiry (See Appendix E for adverts). Communicating an open approach, such as

acknowledging spirituality and wellbeing as subjective and personal terms, whilst also communicating prior personal experience (see appendices, - information sheet), it was hoped that this would attract participants who have had experiences, relevant to the research questions (Patton, 2002), and reassure people that may feel hesitant about sharing personal experiences with a researcher. Following ethical approval the study information was disseminated via a number of different channels, including those suggested during initial consultation stages. These included being advertised on social media platforms (twitter), using recruitment posters. Emails were sent to several key organisations which included Universities (King's College London, Greenwich University, and Schumacher College), organisations, individuals of interest, retreats, and identified online forums of relevance.

Informed consent

Informed consent comprises of two main steps. The first was to provide information with all relevant details of the study. This included, it's design, background information, the purpose of the research, what is involved (the protocol or procedure), what will happen to data collected, possible risks, the right to decline and the right to withdraw. This was followed by providing both written and verbal information, in order for the participant to make an informed decision. The second stage was obtaining informed consent once the participant had understood the terms and implications of the research, which was checked verbally, before being obtained and evidenced in writing which was done electronically.

Confidentiality

Signed sheets with participant identifiers were stored separately from any of the research data. Universities protected cloud storage system (one drive), was used to store all information and data, as per ethical approval. Anonymisation of data was a careful consideration, and is detailed further in reflexive account. Other considerations of anonymity that had to be considered

related to snowballing of sample, and stigma 'between group' (i.e. people from the same work or peer group) which included fear of being identified.

Participants were provided with an information sheet that provides information about the study and possible implications for taking part. This included information about anonymity and confidentiality, including information as to how data collected will be kept confidential and safe within the researcher's university virtual protected server and an encrypted storage device. This virtual server required a secure login and which was only accessible by the researchers of this study. After participants had read the information sheet, if they decided they wanted to take part, they were asked to give informed consent by ticking or initialling the necessary boxes including confirming that they have read and understood the information page. Following consent, participants arranged a date and time for an online interview of between 60- 90 minutes, at a time that was mutually convenient. The interviews were conducted virtually using Microsoft Teams, and by telephone, recorded onto Microsoft teams- in accordance with ethical approval. University remote storage cloud system was used to store recordings securely. The anonymised data was kept securely within the password protected personal university accounts of the researcher (for up to five years) following the submission of the thesis. At the end of this period, all data will be securely destroyed. Following the interviews, participants were offered the choice to be kept informed of research progress, publication and access to published works.

Data Collection- Semi Structured Interview

Semi-structured interviews were used as the primary means of data collection. These were conducted via Microsoft teams, and either audio, or audio and visual (participant's choice) were recorded directly into the Researchers Microsoft Teams University One Drive account, as per ethical guidelines. The interviews lasted between 60-90 minutes, breaking when

required. Prior to starting any recording participants were given additional time for orientation, to ask questions, or voice any concerns. In accordance with ethical approval, and informed consent participants were softly reminded about disclosing only legal experiences, as well as being reassured that they can pause at any time, for any reason.

Reducing distress

Due to the personal nature of the research, it was important to consider and therefore monitor potential distress from the participants. In keeping with literature and guidance it was important to monitor for feelings of shame, or possible connections to trauma (Pietkiewicz and Smith, 2012). In order to do this, regular ‘check-in’ with the participants including giving prior notice that a question may relate to trauma, and to ask their preference, and ensure they felt comfortable knowing they can pass any question, without consequence and without having to justify why. Allowing for comfort breaks, and having a de-brief after stopping the recording was also done to assess impact of the interview.

Participation Information

Seven participants were interviewed as part of this research. There is no one agreed ‘universal’ number of participants required for IPA, but rather the consideration is based on richness or quality and ‘depth’ of data being investigated, ‘saturation’- the extent at which adding more participants yields further insights to a chosen phenomenon, which needs to be balanced against the practicalities of the chosen methodology which is acknowledged as being a ‘labour intensive’ methodology (Smith, Flowers and Larkin, 2009). It was determined by the researcher that in-keeping with the above mentioned points that a satisfactory level of saturation had been reached with the interviews. This was in-part due to the richness of the interviews and willingness on the part of the participants to provide a sincere depth of disclosure of experience. This decision was also made based on the homogeneity of the sample interviewed, which is

one of the recruitment goals for IPA sampling (Smith, Flowers and Larkin, 2009). A summary of basic participant information is provided below. Participants ages ranged from 25-55, and were all UK based. The decision making process of what information to include and not include is discussed under the section ‘*additional ethical responsibilities and considerations*’.

Table 7. Participant Demographics

Name (pseudo)	Age Range	Ethnicity	Religious or Spiritual Heritage (Family)	Religious or Spiritual Status aged 18	Education level	N of instances consuming Ayahuasca (approximate lifetime prevalence)
1. Cameron	26-35	European (Caucasian)	Christian B and Other	Spiritual	Diploma/Degree	1-10
2. Avery	46-55	British (Caucasian)	None	None	Diploma/Degree	40+
3. Willow	36-45	British (Asian)	Christian and Other	Atheist	Diploma/Degree	40+
4. Jesse	46-55	British (Caucasian)	Christian B	Atheist	Diploma/Degree	40+
5. Eli	36-45	British (Caucasian)	Christian A	Atheist	Diploma/Degree	40+
6. Rolo	26-35	British (Caucasian)	Christian B	Agnostic	Diploma/Degree	1-10
7. Rowan	36-45	British (Caucasian)	Christian C	Atheist	Diploma/Degree	1-10

Additional ethical responsibilities and considerations

One of the challenges encountered in this research was the balance between providing information about the participants, particularly relating to demographics. IPA recognises the need for both transparency, as well as highlighting cultural components that may influence

interpretation, which is part of the *commitment to rigour*, as well as commitment to transparency of research process. However, as part of sensitivity to context, and as part of ethical responsibilities as a researcher, there were some decisions which required careful reflection relating to presenting the participant demographic information and how this may relate to interpretation of the data, whilst balancing commitment to protecting identity and keeping anonymity of data.

Due to the small population size of the sample, ethical consideration had to be considered about possible identification of participants, either externally, or within the sample group. This was noted by several of the participants.

The steps taken were:

- ✓ A decision to add enhanced measures to ensure anonymity, particularly with regards to client demographic.
- ✓ To keep participants involved within the finding and results, and sending direct quotes that may be used in the final publication.
- ✓ The interpretation if this was largely around attached stigma of firstly psychedelics, which are illegal in this country and may still carry stigma.
- ✓ But secondly the stigma of spirituality within secular culture and professions.
- ✓ The impact of this was that some secondary themes or commentary which may have added to the impact of the research was limited, ensuring that participant wellbeing and welfare took priority.

Reflexivity as a researcher

Lived experience has to a small degree been discussed at the beginning of this research. As reflected this lends the possibility of personal bias toward a topic that I hold to be important.

However, this is a position I have given considerable thought to, and have ensured as far as possible, that every care was taken to be open, non-directional or leading with questions. The design of the study potentially creates a sample bias, as spirituality by definition, is often something held sacred (Piedmont and Wilkins, 2019). Dean's (2019) research and the more recent Evans et al., (2023) research was useful in reflecting on alternative narratives, or struggles stemming from psychedelic use, or 'what happens when there is no significant connection, or lasting meaning, found?'. In-keeping with IPA, I have been both tentative and reflective on interpretations I have made (double hermeneutics), as well as neither implying causality nor generalizability. My position as a researcher aligns with my professional ethos which is that even understanding one person's experience is important, and that similar to clinical work, there can be utility in bringing 'the self' and lived experience to complex situations, if done with skill and reflexivity (Luke, 2011).

Data Analysis

The process of data analysis was taken from Smith, Larkin and Flowers, (2009) methodology as well as using the updated terminology as presented by Smith and Nizza (2022).

1. Transcribe the data verbatim
2. Familiarise self with the data by listening/watching back the audio/video
3. Making descriptive comments in the margin
4. Noting any 'emerging themes', listing them
5. Once this has been done for all participants beginning to identify "Group Experiential Themes"
6. Cluster Themes into Group Experiential Themes (Formally known as 'Master themes') and Personal Experiential Themes (Formerly Known as 'Sub Themes').

Personal Experiential Themes

With recent introduction of new terminology, IPA now utilises Personal Experiential Themes (PET), and Group Experiential Themes (GET). PET refer to the individual experiences, perceptions and interpretations of each study participant. In order to generate these thorough immersion of the data was required. This included watching the interviews back multiple times, and coding of the transcripts, which were transcribed by the author. Both Microsoft word and excel were used to label each line or sentence with observations, patterns, and meanings attributed to the experience by the participants. Once this was complete, preliminary grouping of similar codes took place. These formed developing or ‘emergent’ themes, aiming to capture the ‘essence’ of an individual’s experience and meaning making. These themes were refined multiple times until clear and distinct themes remained, being mindful to stay faithful to the original meanings attributed. Excel was used to ‘interact’ with the themes, grouping them, and exploring connections within the context of the interview. These themes have been carefully presented with rich, direct quotes, in order to represent the ‘voice of the participants’ as well as the interpretations of the researcher.

Group Experiential Themes

Once the above steps had been taken, the process of identifying ‘common threads or patterns’ were taken by moving PET into ‘emergent themes’ that are shared by multiple participants. Following this a refining and re-defining of themes was undertaken, whilst trying to stay faithful to individual accounts. In this regard some participant’s experiences ‘converged’ or ‘diverged’ with the GET to different extents. These were presented, again with direct and rich excerpts in order to represent the voice of the participant. Through the GETs, a deeper understanding of the possible collective experiences and interpretations are presented and discussed.

Quality in Qualitative Research

Qualitative research has at times drawn criticism for issues in demonstrating quality and reproducibility (Smith, Flowers and Larkin, 2009). The current study utilised criteria by Yardley (2008), which has been commended for its suitability to IPA research (Smith et al., 2009). Yardley states four main criteria which are: sensitivity to context, commitment and rigour, transparency and coherence and impact and importance.

Sensitivity to context

Sensitivity to context refers to the researchers understanding of the topic, and making appropriate selection and adjustments accordingly. In this respect this was demonstrated firstly by the choice of methodology (Smith, Flowers and Larkin, 2009), which was selected in the context of both; limited pre-existing literature or theory relating to the topic, and secondly, in-keeping with the underlying epistemology of IPA which values participants as experts of their experiences (Smith, Flowers and Larkin, 2009). IPA also takes socio-cultural, political and historical influences into context which is particularly pertinent within the literature of spirituality and psychedelics where censorship and enforcement of dominant discourse have played such a prominent role in limiting access to research and individual choice of experience (Nutt, 2014). Study design and recruitment and interviews were executed holding this in mind. Regarding design, several persons were consulted in order to ensure sensitivity of the topic from other people's perspective. For the interviews ensuring they were conducted in respectful and open-minded approach using non-prescriptive and non-judgemental language, helped in building trust and exploring the topic sensitively. This was also carefully represented in the way the data was analysed and presented, using the participant's words to justify interpretations. In addition, consulting participants about the procedure, and ensuring reassurance of sensitivity to data and commitment to anonymity, which involved extra steps and consideration to ensure was done sufficiently.

Commitment and rigour

The commitment to rigour is demonstrated through the pilot interview process, seeking advice from the research team, other IPA researchers, other psychedelic researchers, Neo-shamans.

Transparency and coherence

Transparency relates to being open about the process of working and is an integral part of conducting research, especially within the qualitative methods (such as IPA) which have been criticised for lack of transparency (Brocki and Wearden, 2006). One of the specific challenges faced when conducting this research was balancing transparency, with ethical considerations relating to participant anonymity. Whilst several key findings were found in relation to stigma and perceived negative judgement, aspects were not included to their full, which involved balancing the ethical considerations of progressing research forward, whilst upholding trust as an ethical researcher, and minimising the possibility for participant distress. As such, mitigating participant distress was placed above aspects of 'open research'.

Chapter 4: Results

Chapter Overview

This chapter presents the findings of the IPA analysis of seven participants and their experience of wellbeing and spirituality relating to Ayahuasca use. Following completion of the analysis and interpretation, four Group Experiential themes (formerly known as Master Themes) and personal experiential (formally known as sub-themes) were identified. These will be described in detail using source material of the interview extracts to illustrate how these may apply on a group and individual experiential level and how these may converge or diverge (Smith, Flowers, and Larkin, 2009). In line with ‘double hermeneutic’ methodology care has been given to provide reflexive transparency (where possible) from the researcher’s position, and how this may influence interpretation (Smith Flowers and Larkin, 2009).

Table 8 Group experiential themes and subthemes.

Group Experiential Theme	Personal Experiential Themes
1. Connection	<ul style="list-style-type: none"> - Connecting to direct or ‘primary’ experience of ‘spirit’ - Re-connection- <i>the lost self</i> - Interconnection; seeing a different picture
2. Day-to-day wellbeing (it’s useful)	<ul style="list-style-type: none"> - Changes to lifestyle - Re-evaluating meaning - Identity
3. Ayahuasca AS a relationship (not just an experience)	<ul style="list-style-type: none"> - It’s a process - To a ‘directional’ intelligence - It changes over time, and is complicated
4. It’s not just Ayahuasca	<ul style="list-style-type: none"> -The Group -Shamanistic practices - The Jungle/Nature

4.1 Group Experiential Theme 1: Connection

The first theme is widely reported in the literature of psychedelic experience and spiritual literature, and was a prevalent experience for all participants. Within this Group Experiential theme, three individual themes were interpreted and clustered.

1.1 Connection: direct experience of spirit, sacredness or something *'not easily accessed another way'* (Avery)

1.2 Re-connection; finding dormant, lost or excluded parts: *"re-finding the past - reawakening belief in a different way"* (Eli)

1.3 Interconnection; - 'seeing a bigger picture'

Theme 1- Connection: to 'spirit'

The first individual theme relates to a connection of a direct experience with something deemed as sacred, or other, *"which is not easily accessed another way"* (Avery). In this context I use the term connecting to 'spirit' to denote direct experience to something sacred, rather than connecting with 'spirituality' in a cognitive or intellectual way (which may also include connection with spirit) but which can often be a description of a broader cultural identity, practice or history, such as 'the history of spirituality'. Each participant described an encounter, or encounters with something they deemed sacred, or 'other'.

I saw this light being standing behind me, and then suddenly there was another one, they walked from behind me to in front of me, and I opened my eyes, looking round I could still see my friends, but I could still see these light being with my eyes open or closed, my heart was open, but my mind was like " I don't know what's going on !" but at the same time

there was this real connection with these beings, it was almost as if my soul knew them...

(Cameron)

Jesse, who described themselves prior to this experience as a 'staunch' atheist described the following encounter:

...something there {in the encounter} is named Jesus Christ, what that is, is an open question, but, the implication is that it is some very helpful, erm thing, entity /being/consciousness intelligence or whatever, which when all else is lost, is there to help...Just knowing that that exists, I suppose you know knowing that that's a that's a space that's a realm, that's a thing, that that that's, You know it it it felt, you know, although that was the experience and the reality or otherwise of it, who knows, but it's sort of inspiring...

(Jesse)

Rolo who previously described themselves as agnostic described the following:

Yeah that switch for me was definitely having direct experience and I was like ohh this is something that exists. I can feel it. I can. I'm part of it and I can see it wherever. So therefore I I have knowledge of this experience is hard to write down .. But it's is is something there and, and, and was and was felt. So that for me was the switch to go from agnostic to to like this spiritual agnostic (Rolo)

Theme 1.2 Re-connection

One of the main individual themes was that through this direct connection, something else that had previously been 'lost, dormant, or self-excluded.

For Jesse, it was the re-connection back with a wider spirituality (and (religiousness that had been 'discarded'. Which they described it as feeling hollow.

well first of all, its changed it fundamentally, my Ayahuasca experience have totally and radically transformed my relationship to spirit and to spirituality, and to my kind of world view you might say, I sometimes think of, and I think this is really common or at least it's not un-heard of, you know I was a staunch atheist, I was a campaigning atheist -if your question is how, well by the experiences I've had with Ayahuasca, you know, I don't know where to start, really, things like, obviously it's a question of interpretation right, I'll say that and then I'll say what I'm about to say, because I'm aware of my own cultural background, but beings entities that I've experienced as a guardian angels, ... and saints... Yeah, these these are not figments in my imagination. Yeah. Well, I'll. I'll just say something to that, , which is that that this is this is much more real than I ever imagined. You know, it's a it. It does feel like a, you know, tuning my radio into another coherent realm of being rather than dreaming or anything that's kind of dismissible ... its that sense that there is something there is a really important (here).(Jesse)

That connection and re-connection, led to further connection that begins to describe how this might relate to wellbeing:

so, Ayahuasca has massively expanded my spiritual understanding of, ... my Ayahuasca experiences have been profoundly spiritual in character and that has led to me feeling much more connected in daily life to a direction and purpose and, and er, sense of support, and a new ability to make sense of things, that I wouldn't wanna be without (Jesse)

Eli also described a similar re-connection to religion:

You know, there's still a lot in the Bible that that doesn't resonate with me that that I don't, that I don't agree with I certainly don't go to church and I'm not a practicing Christian. But in in ceremonies, I I do sing to Jesus Christ to bring that energy in. And so it's become a, It's been really nice to re-find that actually, and it's it's been re-finding it, re-finding that part of me my past of my childhood connection to my mum. My mum is a staunch Christian and that's allowed me to reawaken that that belief in a different way, in a different way. It's kind of packaged up and presented in a different way, but it's it's kind of come around full circle (Eli)

For Eli, re-connection was also described as being with a part of themselves, a part which they had excluded or rejected:

I find this really like a really important distinction actually So none of the things that I find have appeared in my life or these characteristics

that have appeared in my life now, as a result of, Ayahuasca, , none of them are new. They're all just things that used to be there. When I was much younger, when I was a child and almost began to disappear

....So I used to be very compassionate and really, really kind and very, very sensitive. And then for a number of reasons I guess through bullying, through heartbreak through, heart break, you know, family illness and disruption..... (and then) I perceived this (part of me) to be to be weak and that I didn't want to accept, I very much pushed away.....

(In the Ayahuasca Ceremony) ... I went through quite painful process and elongated process of accepting that part back into me and feeling much more reintegrated and then feeling much more like the version of myself that happened before of all of these and traumatic events.....So it's really this restoring the original me.... And that would happened in ceremony literally visualising 17 year old me going through all these times..... and just quite physically holding me and saying it's ok, I'm not ashamed of you, I'm not embarrassed of you., and welcoming them back to me (Eli)

Theme 1.3 Interconnectedness- a different perspective

The third individual experiential theme related to interconnectedness, or seeing how the self or other things connected together to form “the whole”. In this sense this theme is similar to experience reported by astronauts seeing the whole world for the first time.

I think there's quite a concrete thing to say, which is around compassion and self-compassion, I think that has really characterised the experience, though I'm not sure it's about spirituality, but in terms of Ayahuasca and wellbeing, there has been a real focus on the work I've done with Ayahuasca, around compassion coming up, and I think that has had a huge impact on how well I treat myself. A cultivation of an inner kindness, which has quite significant impact on behaviour, which I suppose there is a sense of....., though I suppose it does link to spirituality, in that, in the belongingness, maybe there is a sense of, in that interconnectedness, there's a compassion for others and a compassion for self- why would I treat myself any less than I would treat everybody else, we're all in this together, there's a freeing up of being able to be kinder to myself, if I'm a part of everything like everyone else, and not worse, and that may be a way that spirituality and wellbeing connect through compassion (Avery)

....suppose that for the time I am alive, I am part of a whole, that I am conscious of, who knows what happens after, but that I can live in varying degrees of how I am placed within this wholeness, and I guess, having these kind of peak experiences, have opened up the possibility of understanding myself as belonging to something that is so far beyond me..., it was a sense of not being alone in the world, I think it's the interconnectedness, I think it's a sense of belonging (Avery)

For Avery, this interconnectedness, related to a sense of belonging, or being part of something. This perspective appears to have had an impact perspective of the self and others, which they describe as an effect on compassion or kindness for both self and others. For Cameron they

described it as a ‘higher perspective’ or a ‘widened lens’ which fostered a similar response to Avery, but which Cameron referred to as empathy:

From a higher perspective, out of body experience from a widened lens, where your able to perceive others people’s actions and why they did what they did, you can empathise, so I could empathise with the actions of why my Dad left my Mum, and why he chose the life he did, and why we ended up in England, and all the trauma related to that, I was able to, not forget, but empathise and learn to forgive and not hold on to the anger or the upset that I had been, it was incredibly powerful. It made me the person I am today (Cameron)

Having the connection, and being in that light, there was a realisation that we are more than just human experiences, people who have wronged you, or not looked after you, or made mistakes, it’s their experience, it helped me let go of the grudges I had, it helped me realise that what my Dad did, or the childhood experiences that I went through, but that at the core of our being we are all love and light, and that earth is an experimental playground for human emotions (Cameron)

4.2. Theme 2: Day-to-day-Wellbeing (it’s useful)

All the participants could relate to aspects of wellbeing that had been influenced or impacted by these experiences. Willow described a process that could be interpreted as developing ‘assertiveness’ though they did not use that word. They described speaking out:

I was quite like... er.... Quite passive person, I always told myself like, humility was good, but obviously to like, an extent, to a certain degree that can be detrimental, where you are not speaking out for yourself when you need to.. that was like the first kind of thing that I clocked, where, it was just like, it was like “just say it, just do it, just speak out” and this is something that has very notably changed in me, and this is something that people have commented on (Willow)

it's like, ... my life, it's changed my life massively, it's like stuff I wouldn't normally do because of certain risks or something that normally I would be more aware of, but then there's an intuition, like a voice inside of me that's like “do it..! go do that thing!” And then, if I chose to listen to that voice, even though the risks are I feel like there gonna be there, but then certain things will just happen, over time, to make that risk not a thing anymore and get you to where you need to go almost. And if I don't listen to that voice, then things just don't really go very, as well as they... (Willow)

Rowan described having experiences that may be interpreted using the terms ‘exposure’ or ‘addressing avoidance behaviours’ though they use the term sitting with uncomfortable feelings.

I felt very, very sad at the time, I felt like I'd lost out. Like I'd like. I hadn't got what everyone else had got this, you know, incredible experiences and then, you know, a couple of days later. It just suddenly occurred to me like ohh I. You know, I got exactly what I asked for. I I asked to learn, focus, to learn to pay attention and to learn how to sit with un-comfortability and

through doing the sort of most extreme version of that.... (during the ceremony).... Like ...a few things are there just day-to-day basis now like for example like doing (removed) like what I was, you know, struggling with before or whatever that I'm gonna find uncomfortable.., but given just a normal set of, you know daily occurrences it is really not possible to feel as uncomfortable as that (referring to Ayahuasca experience) . So she (Ayahuasca) was sort of teaching me that I could do I could do you know, I can make strong choices in, in the worst of circumstances, and I just felts so amazed and so grateful and so lucky to to have been given that that gift and and given the gift of exactly what I asked for as (Rowan)

Rowan, Willow and Eli all described the impact or effect of the experiences derived from Ayahuasca as having an impact on their concentration and focus:

one of a really big thing was to improve my like focus, {removed } because I've slightly sort of yeah, just Just like hit a bit of a bump in the road with that And attention, that was kind of a little theme. and face, I guess like the kind of comfortability of Just being with yourself

(Rowan)

uh, basically focus like concentration was was the biggest thing. So previously my mind had always been so scattered. To the point where when I was(removed). In order to concentrate when (removed)open and walk around in circles listening to like really heavy metal.

Uh, just because I just couldn't focus it was, yeah, it was like a real issue

(Eli)

Willow and Eli both described changing 'intake' as being a significant part of change to wellbeing. This also appears to be in the context of the wider Indigenous framework around Ayahuasca.

and yeah, and this changing that intake and just getting into all of these, I guess you would call them spiritual practices, really helped me, helped me to focus not just on work stuff, and, you know, writing and reading and things like that, but also to try and be to be present as much as possible.

Uh, yeah, that was really. That's really the biggest impact. I think for one of the biggest impacts in this had. I take care of myself better physically and all of those things are kind of and, and the list goes on (Eli)

4.3. Theme 3: It's a relationship

Relationship- it's a process that changes

Avery described how this process is both like a relationship and also is a relationship that has changed across time. Avery perhaps best articulated this experience that changed across time and how this was characterised through needing time for integration, going through struggles to identify what was them and what was this 'other'.

but that didn't all happen, that's been a process- integrating an experience like that. I mean afterwards it felt totally overwhelming, but that what I described to you was a many years process, to make that in relation to everyday life. ...

I would say with spirituality, there was a period of more splitting that happened at the beginning, things are good or bad, spirituality is a better way of living, but that was for more of a period of time, and maybe it's a stage that people might pass through, but feels like, like the whole spiritual bypassing thing, that there is a risk of experiencing that, but that is quite normal to experience that in the process of making sense and integrating the experiences. In one moment the teaching seems like one thing, and down the line, understanding is a process, how something seems at one moment, may seem so different down, the line, it's so sophisticated (AVERY)

I was using Ayahuasca as a spiritual practice, and if I were to drink now, I would think of it as a spiritual practice, I wouldn't think of it as healing my mental health, I think of it as going to make contact with the inner dimension of myself and broader reality, and if I'm being completely honest, to make spiritual contact to the spiritual experience itself- the relationship to Ayahuasca itself, this particular constellation of this plant and myself and what that relationship is too, which also has a feeling of spiritual dimension, this sense of like, in the traditions Ayahuasca is personified, so there is this sense that there is this other beingness that you are in relationship to, that is trying to help you, so this spiritual connection to that inexplicable relationship in a way, ... (Avery)

So its really changed across time, I would say I have an incredibly strong relationship with Ayahuasca, like that of a very good trusted friend, I trust Ayahuasca completely, I trust that plant, that medicine completely, but I'm also completely aware that I don't even begin to know the beginnings of

everything that Ayahuasca is, if that makes sense, I feel like I have a really intimate relationship and I know the territory of Ayahuasca really well, and I also know there is so much I don't know, so I'm in a place of reverence, and I'm careful how I talk about it, one of the lessons is to remember what you don't know, and what you might have to learn, humility in relation to the plant. Because of the way that it teaches, often the teaching is unfathomably different from the way in which I thought about something before, (Avery)

Both Rolo and Rowan, who were comparatively recent drinkers and had much less experience, described the beginning of a change in process of relating to Ayahuasca. Rolo who was the least experienced of the group described:

Before to me, it was a drink. It was a drink or all of a concoction of plants. I was gone. Now is more of a I don't know. I won't go as far as saying it's just like a way of being or a way of living. It's.. But it's it's more than just a drink. It's like, it's almost, I'd say, a process (Rolo)

Whilst also relatively in-experienced, Rowan describes already entering a process of a relation to something:

it's a growing answer because I've really, really just started to have any form of relationship whatsoever. I would say that it's it's one of the plant consciousness's that. ...Is isn't very subtle in terms of its impact. It's like it's, its very obvious that it has this deep consciousness that it can share with humans, deep plant consciousness (Rowan).

3.2 It's a relationship: To an intelligence

Participants all described varying relation to something that they described as intelligent.

just this mutable kind of transforming energy is the only way I can use for it really, and intelligence. So that's the thing that I trust. That's the thing that I trust when I say I try and trust, is that there is a there is a way, There is a way that is better than the other way. There is a way towards progress, a way towards light, a way, away from darkness and away from bad ideas that, that that life is surging towards. And I'm part of that. I'm part of that surging and the more I get on board with that, the better things seemed to go for me.... yeah, the, the, there's something something there is that's directional and intelligent that that that's the essence in a sense all I'm saying that's my experience and that's my now my belief that having had the experience that there is , there is that, you know, (Jesse).

Willow described this relationship as being one directly to a plant, or a spirit of a plant.

Ayahuasca becomes a way of learning more about or connecting with these master plants, essentially becomes something that helps you open up and be more sensitive to connect to that world to communicate with that plant. I've just been making friends with plants through the help of Ayahuasca basically! (Willow)

The relationship they have entered into does not only have consequences for themselves, but also for this other. They describe aspects of commitment.

the plant that I've connected to is a part of me, and I'm me, whatever I do to the plant I do to me, and whatever I do to me I do to the plant, and I would kind of batter my body, stay up all night and do all this excessive amount of bad wellbeing stuff, bad sleep, and all that stuff, or talk to people in certain ways, and then that would really lead to much bigger consequences than I had before, when I go into those work modes.. I'm finding that loads now, when my tolerance and patience to do the thing that don't align well with my values is much less now, and the stuff that I do wanna do is quick its' easy, if anything I have to stop myself from doing to much of it.....

(Willow)

They also described aspects of teaching or relating to both 'it' and to the self that impacted on aspects of their wellbeing:

When I first started it's like a baby sapling, it couldn't handle too many storms, and one of the things I really appreciated it teaching me, was like learning to talk to myself like a baby, because there's this baby plant in me, I need to look after this baby, and there's stuff like "I love you, it's not your fault, it's ok, I forgive you, " and that internal compassionate dialogue that has really helped, because you know (before) I've kicked my ass hard! You know, and I think everyone, I believe everyone's their worst enemy right?..., no one really judges you or puts you through critique as much as yourself I feel. So that was a really big kind of shift, looking after that little baby, because not looking after that baby and the baby gets ill and the consequences of that is massive, you know (Willow)

Rolo described their experience as feeling like the jungle was speaking through them, and conscious connecting with them:

kind of like this kind of forest jungle cosmos and and then like, just there's just my kind of my sense of self.

Ego, whatever it was, just like slowly being just dismantled, taken apart, and then you just feel like you're a light.

And then then the the the instantly fill this this this sense of oneness and this feeling like you've been here before. I'm like I can't explain it like being here before and I can't remember why or when.

4.4 Theme 4: It's not just Ayahuasca

One of the important themes to arise from this study was that participants described that Ayahuasca was not the only part that was significant. They described a range of additional aspects that felt very important to the experience of wellbeing, and of what made it a spiritual experience. These included the group, a respect, reverence or appreciation for aspects of the Shamanic practices arising from indigenous culture, as well as the setting- the jungle.

Rowan described the importance of the group, and the activities alongside as being an important aspect:

...the love and acceptance of the group when.....when we were singing together and when we were laughing together and when we were sharing together and... It was sort of as close, you know, to an idea of a utopian heaven that that I think... It was like we we were actually truly connected with our authentic selves.and without all that nonsense that gets pulled on you in the world...

And it felt like people were being so vulnerable, like they were sharing the most horrific life stories....And, you know, sharing their shame, their pain. And just that everyone out in the jungle like...Sort of. You know, saw that and held ..and just listened, just witnessed. That felt like a very, what what, sort of spiritual community should be somehow (Rowan)

Rolo also described the importance of the group:

And then, yeah, from then on, it just gets more and more and then by the 8th or 9th day, you're like, wow, like you do have this kind of self-realisation like "shit I'm I'm part of this!" I'm like, I really have been engulfed in all of this. And like, even when it's just like you're at the retreat and you just you just having a little little chat and people, the conversations do get deeper and deeper like... Talking about like traumas and how they the these medicines help some of these people face there their traumas or just things in our lives that they've been not able to get over, get through and all these kind of things and like there's this like you can see this kind of, this weight come off of their shoulders and there's been released and I think the reactions to that is obviously very positive and that's being reinforced back on them. So like there's that paradigm healing as well and it's just. It's it's very much they see this reflection in in themselves by talking to other people and and then I get because I'm part of that. I can. I can, I can really see it. So yeah, when I say getting pulled into the process, that's what I mean like, like the the healing out there is not a structured kind of process is a lot of things happening a lot.

Rolo described the importance of the shamanic presence within this experience:

.....and the the the Shaman he's singing these icaros and he's very much guiding the experience. It's a bizarre feeling where it's like he's creating these ...kind of stories and and and things I mean, brings up the mood, brings up like height, {of the experience} almost. And he's got very much control of it. It's almost like he's built these bridges. He's like, these pschological bridges amongst all of the participants. And they're like these waves and then he's singing these songs. And then every now and again, he feels like he's singing directly to you. And it's almost like he's got a channel, like, between me and you right now. He's explaining to me what I need to do to find some healing. And then you go off and you go to try and interpret that through one of these little experiences. These these, these trips And these journeys that you go off in, in, in, in your mind and then you kind of come back and then and every every now and again he does that he does that again and again and it's not really.

He's not really healing you. He's just showing you the pathway to find to interpret how you, how you need to find healing.

For Willow, the Jungle itself was very important in a spiritual sense, but also the intersection of indigenous perspective or knowledge system, was in-turn important in accessing this experience:

and it's way more than just Ayahuasca at this point, why I drink Ayahuasca. I think the plants are a big one, you know when I went into the jungle,

Ayahuasca was my focus, I'm gonna drink Ayahuasca, then you realise that the jungle is an Arsenal, a whole hospital of medicines with all kind of things and spirits, the more I tap into it, Ayahuasca is for me a gateway, just a supporting tool to help one kind of like be better sensitive to what the shapibo call the dieta, a person's dieta, looking into ones connection with things that they engage with, so the way I use Ayahuasca now is less about; "I'm here to solve my problems", I'm gonna do that as an adjunct, you know, my integration, but its more to help me connect with the spirits in life that have chosen to really help me out (Willow)

I think it is something that I had begin clocking into way before Ayahuasca, I don't think Ayahuasca is necessarily the key to anything, I don't think anything is the key to anything. I think there is a lot of people who hold that balance without ever having touched psychedelics, one really interesting thing I find about this, is that come to peoples attentions way across cultures internationally, throughout time, Buddhist practices, yogic practices, just the whole technology of fasting and meditation and doing stuff you lovethat interconnected state people can get into when falling in love, learning a new language, going travelling, all this stuff right, so it can all be a facet of interaction, but I wouldn't say Ayahuasca made me this (Willow)

....when you tap back into it, my life is transformed by those experiences, I'm a radically different person but the thing is life is also happening

alongside all of that, I've also done year and years of therapy, I've had different relationships, and changing things in my life, so its really hard to know or to say it's had "this impact" it's a whole tapestry of experiences weaving into my life, but they were profoundly important, yeah they were profoundly important (Avery)

Chapter 5 Discussion

The current study explored the experience of spiritual phenomena and wellbeing in relation to Ayahuasca use of 7 individuals from the UK. Using Interpretative Phenomenological Analysis four main group experiential themes were derived which will now be discussed. The themes were:

- 1. Connection (re-connection and interconnection)**
- 2. Day to Day Wellbeing (lifestyle, meaning and identity)**
- 3. It's a Relationship (to an 'intelligence', it changes over time)**
- 4. It's not just Ayahuasca (The group, Shamanistic practices, the jungle/nature)**

The themes derived represent a systematic attempt to faithfully represent the data disclosed by participants' whilst acknowledging the interpretations are 'shaped and coloured' by the author (Smith, Flowers and Larkin, 2009). One initial reflection was that there was a resistance in attempting to reduce the narratives to 'parts' which perhaps 'echoed' some participants hesitation or concerns in a 'reductionist approach'. This is reflected in the first group experiential theme which related to connection and almost presented as an overarching 'meta theme'. However, in order to present and explore the ideas four major group themes were derived with, additional personal experiential themes (formerly known as sub-themes).

5.1 Theme 1: Connection

The first major theme was 'connection'. This theme permeated the data sets across all participants, and presented itself almost as an overarching 'meta theme'. Participants reported a direct experiential connection with something that was 'sacred', 'spiritual' or an 'intelligent other'. The experience was important for participants for a variety of reasons, but one of the qualities that was communicated was that this was a direct personal connection that was tangible and 'very real'. This was significantly emphasised by the contrasting language

participants often used to denote a ‘perception’ of spirituality compared with the direct primacy of the experience they were describing. For example the words ‘*Waffy...empty linguistic phrases*’ (Eli), ‘*woo*’ (Willow), ‘*hollow, meaningless nonsense*’ (Jesse), ‘*guarded against woo*’ (Rowan) were used to describe prior-held perceptions of spirituality, to varying degrees. In contrast the way in which participants described the experiences of Ayahuasca were that the experience was real, meaningful, tangible, and useful, with a number of participants describing the connection with something ‘sacred’ as being scientific-like or ‘*as real as me talking to you now*’ (Jesse). The primacy of the experiential phenomena was expressed very differently by each participant, but the immediacy of connecting to, or with this ‘*other*’ was shared by every participant. Two of the participants had pre-existing world-views in-keeping with spiritual beliefs (Cameron and Willow), and both expressed these experiences as reinforcing or confirming something important. In contrast, 5 participants reported the experiences encountered with Ayahuasca as running in contrast with prior-held beliefs about spirituality. This is of interest when considering Piedmont and Wilkin’s (2019) first two presuppositions of the ‘numinous’ which state ‘*it is not a product of worldview, philosophy or religion, but it precedes these constructs*’ and that ‘*all peoples share it to varying degrees (controversially, even those who are agnostic or atheist)*’. The participant’s description of the connection they described is interpreted by the author as striving to convey legitimacy of these experiences; that there is something of great significance about this connection to the ‘sacred’ or ‘non ordinary’, but that there is an awareness of how this may be perceived within a secular or scientific culture. The ability of psychedelics to promote cognitive flexibility, neuroplasticity and what Michael Pollen (2020) described as ‘*the ability to change your mind*’ is emerging as one of the fundamental properties of psychedelics, and psychedelic-assisted therapy (Cahart-Harris, 2016). Neuroplasticity and cognitive flexibility is often described in the literature in terms of pharmacological properties and the activation of alternative neuronal networks

(Cahart-Harris, 2016). Within this study what is suggested is that for five of the participants their worldview may have been challenged, through the direct primacy of the experience they encountered, which may represent a new set of experiences. This encounter may be what Piedmont and Wilkins, (2019) describe as an encounter with the ‘Numinous’. One participant described that after encountering this phenomena, that it was something they ‘*did not want to be without*’ (Jesse).

5.1.2 Connection; Re-connection

One of the personal experiential themes of connection was that of ‘re-connection’. For some of the participants this related to aspects of ‘individual identity, or personality’ that had been ‘rejected’ or ‘excluded’ (Eli, Rowan), and for others it related to aspects of cultural, religious or spiritual heritage (Eli, Willow, Jesse, Rowan). For Eli, this re-connection was expressed in a re-remembering and acceptance of personal characteristics such as compassion and kindness, and being ‘sensitive’. This appeared in the form of autobiographical memory recall that was observed during the ceremony. Eli described literally ‘seeing themselves when they were a child’ and re-connecting with qualities that had not perceived as desirable, or that would have made them vulnerable, such as being ‘nice’ and ‘sensitive’ . The process of re-integrating these experiences was then continued over a number of weeks both in further Ayahuasca ceremonies, but also outside of these sessions. This is in keeping with the emerging literature which states that both the interaction within the Ayahuasca experience, as well as the integration of the experiences may be important for fostering lasting change (Timmerman et al., 2023). This account is also in-keeping with reported increased compassion following Ayahuasca use (Sampedro et al., 2017) and highlights a possible therapeutic mechanism of action which is the re-acquiring or re-remembering of skills and traits such as compassion, which had potentially been present, but which may be ‘lying dormant’, or schemas that may be useful have been ‘discarded’ or suppressed based on past negative experiences or trauma (Agin-Leibes et al.,

2022). In Eli's case this stemmed from early ongoing experiences of bullying, social comparison and negative self-appraisal all of which are all well-established risk factors for poorer mental health (Carvahlo et al., 2018). Re-connection was described by some participants as a re-connection to cultural heritage that had been 'rejected'. For four of the participants this was in the form of re-connecting with religious heritage, though experiencing or 'expressing' this in a new way. This again brought a number of practical implications that were described as being beneficial to the participants. For Jesse this was described as: "*What Ayahuasca helped me to do is re-connect with all the rich history, religions, spirituality, animism, all the stuff that we have smashed and burned, or seen somehow as childish or something.... And re-connect with all this meaning..... a craving for what is missing*". For Jesse this led to both an increased sense of meaning within their life, but it also led to a re-connecting with other spiritual practices and religious texts that they described as '*immensely helpful.... And vital*'. In this regard having a direct experiential connection of something perceived as practical and with 'real world application' fostered a re-appraisal of Jesse's religious heritage in a way that imbued it with a new meaning or purpose, when they had previously described it as '*hollow and empty*'. In this regard, there is a re-appraisal of both past and current experiences and beliefs, which may be significant, as well as a re-connection with wider historical cultural narratives.

For Eli the re-connection or re-evaluation of this aspect of their heritage, had a secondary outcome of re-connecting to family, specifically to their Mum. They state: "*It's been really nice to re-find that actually, and it's it's been re-finding it, re-finding that part of me my past of my childhood connection to my mum. My mum is a staunch Christian and that's allowed me to reawaken that that belief in a different way*" (Eli).

For Rowan too, past negative experiences which they associate with religious heritage meant they were '*guarded against spirituality*'. They described a re-connection with spirituality as

being a positive experience as it led to directly useful information and insights into the self. Additionally, the re-appraisal enabled a re-evaluation of group connection, which they found very beneficial and which is discussed further in Theme 4. An interpretation of these experiences could be through the concept of ‘contextual matching’. Literature on religious and secular beliefs indicate that having strongly differing worldviews from parents, family and surrounding culture can create dissonance, and greater feelings of disconnect (Kugelmass & Garcia, 2015). With the general reduction of those identifying as religious in UK, it is possible that a sense of dis-connect is created with previous generations of cultural tradition. Whilst Jesse, Eli, Rowan and Willow do not identify as sharing the religion of their cultural heritage, they described varying degrees of acceptance or integration for parts of these concepts arising into a new framework as a result of Ayahuasca use. The impact is that this led to reported re-connection with cultural heritage, family connection and personal construct reconciliation in a way that is individually meaningful, and which re-opens the possibility of wider spiritual practices, texts and concepts which have been shown to be useful for a variety of reasons outlined in chapter 1.7.

5.1.3 Connection; Interconnection

The last personal experiential theme was ‘Interconnection’, which overlapped with many other PETs and GETs, but was a different way of experiencing or expressing connection. The experience of interconnectedness, was described by some participants as feeling like being part of “a whole” or ‘seeing a bigger picture’. For Cameron they described: *“From a higher perspective, out of body experience from a widened lens, where your able to perceive other people’s actions and why they did what they did, you can empathise, and all the trauma related to that, I was able to, not forget, but empathise and learn to forgive and not hold on to the anger or the upset that I had been, it was incredibly powerful.”* This experience for Cameron led to a change in perspective which they described as significant in helping them to re-process

substantial childhood trauma more than 20 year prior. They described this Ayahuasca experience as occurring approximately 5 years ago, and that this experience still continues to inform their life choices in a positive way. Preliminary field-studies by Sampedro et al. (2017) reported increases in the capacity to observe thoughts and emotions in a detached manner and to reduce automatic negative judgement attitudes and inner reactivity (Sampedro et al, 2017), which may be implicated as one of the mechanisms of action, for re-appraisal painful or traumatic memories. However they also described the presence of ‘light beings’ and feelings of immense love at the same time, which they described as fostering a feeling of immense gratitude. It sounded as though a combination of these experiences, helped foster a sense of forgiveness through feelings of empathy, and holding multiple perspectives, and that this feeling of love may have assisted with looking at trauma memories. Experiences similar to this have been reported in MDMA assisted therapy (Emerson et al., 2014), and is often described as memory reconsolidation. However, the phenomena of ‘light beings’ are of ontological interest as the feeling associated with ‘their’ presence was described as being familiar and felt ‘*like coming home*’. This was the exact phrase used by Rolo to describe their experience. In a similar way to Cameron, Avery also reported a strong sense of interconnection. They stated: “*maybe there is a sense of, in that interconnected-ness, there’s a compassion for others and a compassion for self- if I’m a part of everything like everyone else, and not worse, and that may be a way that spirituality and wellbeing connect through compassion.*” Within spiritual literature, this connection to something bigger, and the feeling that ‘everything is connected’ is a widely reported phenomena.

Even within non spiritual, or secular research, ‘seeing a bigger picture’ or ‘experiencing vastness’ can lead to the experiencing of ‘awe’. This phenomena is reported by astronauts seeing the world in its entirety, or even people visiting the Grand Canyon. Within this context, the psychological and possible evolutionary function of awe is described as a process of

suddenly experiencing vastness where there is no prior mental structures (experience) to assimilate a large volume of new data that is considered of potential importance to an organism/person (Keltner and Haidt, 2003). Within this context it could be argued that Cameron and Avery have experienced ‘vast states’ of interconnectivity which presented ‘new models’ or new context of how they fit in to ‘the bigger picture’ which led to re-appraisal of not only themselves, but of others around them and how they may relate to them. For Cameron this led to them forgiving their father and ‘*letting go of deeply held grudges*’. For Avery this led to increased self-compassion, both of which have strong evidence base within 3rd wave CBT literature for ACT and CFT for the benefits to mental wellbeing (Gilbert, 2013).

What is also interesting about the subjective phenomenological experience of interconnectedness and vastness is from a neurobiological perspective. Neuroimaging studies from Cahart-Harris’ (2019) REBUS study, and the more recent Timmerman et al., (2023) neuroimaging studies have highlighted the role of neural ‘hyper-connectivity’ that occurs following the use of Psilocybin and DMT respectively. The implication is that there are greater ‘degrees of freedom’ or greater ‘access’ to a broader range of autobiographical memories, feelings, associations, interpretations, held-beliefs that may lead to new cognitive and emotional processing, that may otherwise be ‘suppressed’ or ‘filtered out’ by the neo-cortex and proposed Default Mode Network (Cahart-Harris, 2016). The implication of this data may be that when people experience ‘connection with everything’, they are in fact literally experiencing increased neuronal connection, which is interesting from a neuro-phenomenological research perspective. For example when people describe feeling ‘dis-connected’ such as severe depression or negative-symptoms of psychosis, might they also be describing a neurological state of reduced neuronal connectivity.

A divergence away from connection was also reported by Avery and Rowan. Avery disclosed that there had been times when following a ‘spiritual path’ from Ayahuasca use had led to a

process which could be described as ‘spiritual bypassing’; using spirituality or religion to actively avoid difficult feelings, interactions or responsibilities (Welwood, 2000). Avery described feeling disconnected with people around them as a result of Ayahuasca practice as it generated an ‘us and them’ dichotomy, and they described not knowing what ‘the right way was’ or whether this ‘new way of being’ was ‘better’. Within this context an interpretation of this experience was that ‘new information’ or ‘new lifestyle practices’ created a form of cognitive-dissonance and alienation from people who did not partake or share this worldview. Avery described this as creating a state of loneliness and that it took time to navigate. This is in-keeping with recent emerging literature into *Extended difficulties following the use of psychedelic drugs*, in which the authors (Evans et al., 2023) discuss reported instances of existential struggle, and social disconnection following psychedelic use, as previously reported by Dean (2019). There is significant overlap with literature on spiritual and religious beliefs and struggles (Sandage et al., 2020).

Difficulties were also experienced by Rowan who described one Ayahuasca session leading to acute feelings of hopelessness, despair, disconnection and suicidality during the session. They reflected however that whilst this experience was ‘horrendous and torturous’ whilst it lasted, that afterwards they reflected that this had ‘forced’ them to ‘confront’ these difficult experiences and feelings, and that by doing this they had reached a new appraisal about their ability to tolerate difficult and distressing feelings, which they reported as feeling ‘liberating’ weeks after. Again these experiences reflect the necessity of integration of experiences, without which, could be highly distressing, and alienating as reported by Evans et al, (2023) and Dean (2019). In the case of Rowan this experience is in-keeping with prior research which indicated decentring, imaginal exposure, and exposure (somatic, challenging emotional states) could also be major psychological mechanisms underpinning change (Soler et al., 2016). From both the SLR and the interviews a number of proposals can be put forward to support integration of

experiences. These include the framework in which Ayahuasca use is taken in combining traditional approaches with neo-shamanic, or ‘hybrid approaches’ (in addition to set and setting which is well established, Gandy, 2023). The amount of time spent with a group to help share, normalise and integrate experiences. Having a therapeutic framework such as Garraway’s Holistic CBT model in which to formulate integration. And lastly, prior to use, having an understanding of potential cultural resources (or lack thereof) that can ‘contain’ or act as a ‘frame of reference’ (Hawkins, 2021) for spiritual or religious experiences.

5.2 Theme 2: Day-to-day Wellbeing

Theme 2 relates to multiple practical aspects of day-to day aspects often more associated with wellbeing. These were very broad and encompassed a range of observable changes reported by the participants that they associated with Ayahuasca use (and accompanying practices- see theme 4 “Not just ayahuasca”). Within this theme there were personal experiential themes of lifestyle, identity, and meaning, many of which overlapped, but could be ‘housed’ in the larger Group Experiential Theme of Day-to-day wellbeing. Cameron, Avery, Willow, Rowan, Eli, Jesse, reported changes in ‘lifestyle habits’. Willow, Eli, Rowan and Rolo, reported a change in ‘unhelpful behaviours’ (as self-reported). For Eli this was changes in lifestyle choices of dietary intake and substance use. This included self-reported reduction in the use of alcohol, as well as pornography. For Willow they specifically used the term ‘intake’ to refer to a reflection on all things that they ‘consumed’ whether it was food, alcohol, or intake of the types of films they watched, and aspects such as noticing a lack of quality of sleep. They also used this term to refer to the amount of work they did. Within the literature, there are studies which report change in lifestyle habits and dietary and behavioural consumption. It is not fully understood why this should be the case. It may be due to increased awareness of the body or ‘somatic’ awareness and mindfulness, that people become more aware of ‘unhealthy lifestyle choice’, and increased motivation toward healthy lifestyle. However, Willow for example described the

ingestion of Ayahuasca as being a kind of ‘symbiotic’ relationship (which is addressed in Theme 3) which gave rise to a direct assertion that any harm done to themselves is also harm done to the plant, and that this was from a metaphysical, spiritual or psychological interpretation; ‘am I treating myself and the plant well?’, which will be further explored in this chapter. For Rolo it was a small act of giving up smoking. The reason reported was a similar increase in awareness of the harm that this was doing to their body. More specifically they reported that they found it easier to directly ‘confront’ this fact. They expressed finding it easier to ‘be with the discomfort’ of not smoking for a few days until they no longer missed the experience. The theme of what may be referred to as ‘confronting avoidance behaviours’ was prominent. For Rowan, Eli, and Willow, they each described experiences of what might be referred to as ‘avoidance behaviours’ that were having a negative impact on their lives, as described by them. For Rowan this was avoiding ‘being with themselves’ or more specifically being ‘uncomfortable with negative thoughts, and negative self-criticism’. For Eli it was expressing parts of their identity which they had previously been ashamed of, or had been avoided due to feelings of shame that would arise. For Willow it was about ‘taking a risk’ and ‘being less passive’, ‘avoiding making mistakes’ or ‘avoiding upsetting others’. In a paper titled: *Learning to let go* Wolff et al., (2020) proposed a CBT framework for changes following psychedelic use with the reduction of avoidance behaviours as one of the core mechanisms of action. In standard CBT models, avoidance behaviours are addressed predominantly through repeated graded exposure to a feared stimuli, in order to reduce the ‘fear response’ and re-appraise level of threat and ability to cope. Reduction in avoidance behaviours was described by participants, though there may multiple methods of how this appeared to be reached. These included imaginal exposure and actual exposure to uncomfortable stimuli, (also as theorised by Sampedro et al., 2017) but it could also be interpreted as occurring through re-appraisal of the self specifically from a reduction in negative self-appraisal. In addition,

integrating traumatic experiences, experiencing feelings of love and compassion, increased connectedness as well as serotonergic effects of Ayahuasca could all be theorised to reduce anxiety, which is predominantly at the route of avoidance behaviours. At least 2 participants, Eli and Avery both reported a reduction in the fear of the unknown, or being able to cope with it better following Ayahuasca use. Fear of the unknown has been reported as a possible mechanism between psychological distress and finding life meaning (Ostafin, Papenfuss and Vervaeke, 2021).

5.3 Theme 3: It's a Relationship

The theme of relationship arose in all participants, and included relationship to Ayahuasca as a relational 'object', as well as Ayahuasca as a practice or tradition. There are overlaps with connection, though what defines this theme of relationship, is that it is a process that can change or develop over time. All participants described a relational aspect to Ayahuasca, though these varied. Three participants reported experiencing this as an intelligent spirit of a plant that they were communing with, and entering a relation with. Cameron described this a technology belonging to the earth's consciousness. Eli described this as a vessel to connect with spirits. Whereas Avery described it as a personified relation. Jesse described it as intelligence of the universe. Within this theme there are varying degrees of personal 'ontological' explanations or interpretations, however all participants described Ayahuasca in some manner of either 'being' and intelligent entity that they enter a relationship with, or it being a mediator to access and intelligent force or 'other'(s). This is perhaps the most difficult to discuss using previous research literature. Psychological or neuro-cognitive ontologies categorise these experiences as hallucinatory, or arising from the brain, similar to current models of voice hearing experiences, which are usually described using 'pathological' or 'disease models' as aetiological explanation. New neuroimaging studies such Cahart-Harris's (2019) REBUS study or as Timmerman et al., (2023) DMT study may offer explanations via hyper connectivity or

greater 'degrees of freedom' (greater, less restricted access) to a range of brain structures and neural pathways, but this does not explain the perceived, directional 'higher order' re-modelling or re-appraisal. For example, the perceived 'self-assembly' of intricate visual imagery is reported as having correlates with optic-structures. There is currently no explanation (that the author is aware of) of the interpreted 'self-assembly' or 'directional' perceived utility of the content that arises within dialogues. To phrase another way, the interpretation of the experiences reported by participants were that the dialogue they encountered, which was perceived as not 'arising from the self' (though this possibility was not ruled out) seemed to have an operational direction toward themes of reconciliation, forgiveness, acceptance, concepts that are known mediators of better mental health and wellbeing. Whilst it is possible that this is down to a selection bias of participants, or a further selection bias of experiences chosen to be reported by participants, the description of perceived 'knowledge' or personal insights seemed non-random, directional and having utility. One explanation is from the school of psychoanalysis, Hollis (2009) states that 'patients usually have some idea of what needs to be worked on, whether they are aware of this process or not'.

Relationship: It changes across time.

With the ontological question of *what is it that people are experiencing a 'relation to'* to one side, the aspect of relational spirituality was observed to be significant. Relational spirituality can be both a source of strength and 'spiritual fortitude' to be 'drawn upon' as well as generating, dissonance, isolation and struggles, are in-keeping with spiritual explanations of wellbeing, particularly relating to integration. Avery for example reported aspects of 'spiritual bypass' (Welwood, 1990) that created alienation and confusion. In particular they commented they had 'nothing to draw upon' which made 'navigating the experiences difficult'. This is also in-keeping with the finding from the SLR which highlighted integration of the experiences to be potentially as important, or if not more important, in longitudinal outcomes. It also

highlights that these processes change over time, and are complicated. Dean (2019) highlighted the potential detrimental outcomes of Ayahuasca use without follow-up or integration. Mirroring the literature regarding spirituality and wellbeing, the study by Dean suggesting negative consequences (2019) was in the minority, and may highlight an inherent researcher bias. For example, the literature suggests Psychologists are less likely to be religious or spiritual compared with clients they see, and may therefore be less inclined to study the effects of spirituality on wellbeing, leaving an interested minority, and possible researcher bias. One suggestion for further study is how best to integrate these experiences into people's lives. One of the existing models currently used within NHS practice is Garraway's (2021) Holistic CBT model which explores and utilises client's beliefs, including helpful and unhelpful aspects of spiritual beliefs, into a personal formulation enabling integration.

5.4 Theme 4- *It's Not Just Ayahuasca*

The group was described as being important by several of the participants. This included aspects of 'witnessing', sharing trauma, being vulnerable, laughing and singing. The group may represent an important aspect for integration through the process of 'normalisation' 'context matching', and shared support. The benefits (and complexities) of groups are well documented within psychological literature, and are also in-keeping with some of the proposed mechanisms underlying religious and spiritual experiences and wellbeing (Koa, Peetet, and Cook, 2020).

Shamanic frameworks

The indigenous shamanic framework was mentioned as being important for many participants. This included the songs (or icaros) of the Shamans, the 'held space' in the jungle, the knowledge and customs of Ayahuasca use itself, as well as an array of 'adjunct' practices. These included '*dietas*' a type of spiritual fasting. This aspect appeared to be of high

importance for Eli and Willow, and were described as being components of spiritual (and psychological) growth. The combination of different aspects were interpreted as a completely immersive experience whereby every sense, somatic, psychological and spiritual were engaged in a form of bio-psycho-social-spiritual experience. It is argued that the state of dissolution and chaos of the numinous brings about new knowledge, and is the basis for all religious experience (Peterson, 2002). “The shamanic process of transformation appears as the means by which cognitive systems are updated when necessary (Peterson, 2002, p219).

In addition to this, the jungle and use of ‘sacred’ plant, was reported by most participants as creating a felt sense of connection with nature in a way that is more in keeping with ‘animism’ or the notion of sentient consciousness of all life. This felt sense, or the reported phenomena of ‘symbiotic encounters’ with ‘plant consciousness’ does not fit with current ontologies within science or healthcare, and as a phenomena is both complicated to investigate, and hold a certain amount of ‘stigma’ within current scientific discourse. One area for further investigation might be to understand why the experience of DMT alone is often reported as chaotic, technological or ‘sterile’ and at times ‘malevolent’ (Strassman, 2000) whereas Ayahuasca is often experienced as a ‘living entity’ which is often reported as being experienced as ‘benevolent’ and ‘directional’ or functional. One aspect that appeared that was significant was there seemed to be a ‘directional’ component of experience within a perspective of utility. For example all participants reported a pull toward things that were interpreted as being more useful, healthy or meaningful (which is the researcher’s interpretation of the participant’s interpretation), and is interesting within a moral realist context. i.e. people reporting aspects of compassion, forgiveness, kindness which are generally promoted as ‘healthier’ positions from both a spiritual or religious position, as well as from psychological perspectives such as those promoted in 3rd wave CBT models such as ACT and CFT models).

Reflexivity

One of the challenges was placing the experiences into themes, for two main reasons. The first was that interconnectedness ‘connected’ to all themes and sub-themes, and that each theme and sub-theme could be ‘re-housed’ into each other using this as an ‘Overarching meta-theme’. This was considered, but would have provided less clarity when attempting to present complex themes. A quote from one of the participants highlighted the dilemma:

“I’m hesitant to try and separate these experiences... it feels like the experience is somehow more than the sum of its parts” (Avery)

It felt like there was a process of discussing spirituality as a “wholeness” and within that wellbeing was a part of, and vice-versa. One of the participants used the “yin yan” as a description, and this could describe the way wellbeing and spirituality are imbedded and both compose of a part of each other. What it highlighted was that for the participants, wellbeing is linked to spirituality, and spirituality linked with wellbeing, but that it is not a uni-directional or simple ‘cause and effect’ phenomena, but rather a changeable and sometimes unpredictable process, which could be described as a relational process. From the data a broad ‘model’ is that connecting with ‘spirit’ (whatever that means personally i.e. meeting with a plant, going to an ‘alternate realm’ or connecting with the ‘whole self’/bigger picture), is that it impacted evaluation and re-evaluation of both larger ‘ontological’ possibilities, but also day-to day aspects of life-style habits, and that all of these things are part of spirituality, rather than the experience of Ayahuasca alone being the ‘spiritual component’. In this sense, Ayahuasca enhanced meaning sometimes through re-connection of things that were distant or ‘dormant’ or disconnected/never present (religion, spirituality, relationships, parts of identity, and ways of being with self or others) or affirming, confirming, or strengthening pre-existing beliefs of concepts of self and others through direct connection, that is to say through direct experience of the senses and consciousness.

One reflection that came from this was that it highlights the likely inherent selection sample bias, (as well as possible interpretation bias). For example, one participant, Eli, (the only participant to do so) mentioned some Shamans using Ayahuasca for harmful motivations as well as healing. One possible study would be to compare phenomenology of experiences where the intention of doing Ayahuasca was not to heal, but to harm, and to compare the phenomenology of experiences. It also raises questions about social construction, would someone with high psychopathy traits connect with ‘value based’ outcomes in the same way?

Stigma

Several of the participants expressed concern relating to issues relating to being identified. This was interpreted in a number of ways. Firstly deeply personal, very precious and cautious about airing something so important Secondly there is still some stigma attached to psychedelic use, Thirdly there is stigma attached to the word ‘spirituality’ and how this is perceived within secular culture. This relates to an awareness by the participants that these are outside of current paradigm or dominant discourse

This was expressed by Jesse:

All I'd say, I can only underline the importance of this experience for me, and your experience for you, I'm glad your doing it, this is the first time I've really engaged with this triangle of Ayahuasca, spirituality and wellbeing, and heard my own thoughts about it which I've actually found really helpful. In a secular society it's a real struggle to find the right words and have the spaces in which you can talk in a non-judgemental way, in an open and interested and curious way, as you have, about it and go, try and make sense of it, so I think that was really important. (Jesse)

What was interesting to note was that with the exception of one person, Christianity played a theme. For at least two of the drinkers there was an integration of religion back into the practice. This also coincided with connecting with relationships. In this regard spirituality and religion interconnect with cultural identity and social bonds. It perhaps also acted as a familiarity for integration. The one person who was non-religious of spiritual growing up reported the most struggles of process (though this does not imply others didn't) and an interpretation is that there is some kind of 'familiarity' with ceremony, or ritual, which was overtly expressed by 2 participants. Lastly, the cultural connection is a less explored concept, connecting shamanic practice with Christian practice which have both been present in cultural heritage of the UK (Letcher, 2013), but integrating it with scientific and psychological constructs.

Limitations

This study had several limitations. Firstly the access to information and data collection was very difficult owing to the legal status within the UK. The sample therefore likely consists of an over-representation of resources financially, as well as educationally. In addition to the small sample size inherent with IPA this potentially makes the participants less representative of who may commonly use services. Longitudinal effects were observed only in some instances, as there were differing timelines of usages amongst participants. Lastly, the SLR contained only a small number of studies, which limits applicability of the themes found.

Final thoughts and Implications

Whilst this is a small study, it provides rich nuanced accounts of a wide range of aspects relating to the phenomena of spirituality and wellbeing, and the complexity around this topic. UK based participants, many of which had considered themselves atheists, had reported their experience (s) of Ayahuasca as a spiritual experience, or of consisting of experiences perceived as spiritual.

Whilst this differs for each individual, it emphasises that for those in the UK, Ayahuasca is not purely a pharmacological compound, or psychological therapeutic tool, (though it does not exclude these as parts of a wider descriptor).

What was evident from both the direct verbatim accounts of participants as well as from more broad interpretation of group experiences, is that there is a hesitancy to attempt to point to linear cause and effect “this caused that” rather there is an incredibly wide range of factors that appear to contribute toward experiences of altered wellbeing. Aspects of wellbeing reported included elements of identity, early trauma, meaning, lifestyle habits, diet, connection, coping with difficult experiences, all of which are potential targets of interest to the therapeutic professions.

Participants have described broad ranging associations with wellbeing, from lifestyle habits, ‘avoidance behaviours’, relational processes (including aspects of compassion, forgiveness and increased empathy) as well as re-evaluations of meaning and existential questions. All of these aspects have therapeutic potential. There aspects which appear compatible or in-keeping with 3rd wave CBT modalities, such as ACT, CFT and more generic CBT. However, participants had a strong sense of not disconnecting aspects ‘of the whole’. It is a suggestion that should Ayahuasca be used as a therapeutic tool, OR should a model need to be used following it’s, that the holistic CBT model could be used, which includes the spirit or the sacred into psychological formulations of health and wellbeing.

One of the implications is that reported outcomes from these experiences appeared to be largely self-directed, that is to say realisations, perceived insights, alternative perspective generation, changes in attitudes or held beliefs, were described as arising largely from an individual’s ‘own’ resources, though facilitated through a range of methods including shamanic practices and group interaction. This has empowering possibilities when directed at clinical work.

However this is drawn from an ontological assumption that information experienced by participants was generated via their own consciousness. One aspect that is challenging to existing models of psychological and neuropsychological models of experience is the reported internal 'dialogue' which was expressed as being experienced from an 'intelligent other'. This was interpreted in a variety of ways as being a plant consciousness, a directional intelligence, the spirit of a plant, 'light being' and the 'personified spirit' of a plant. There are currently no models outside of pathological explanations for this experience.

Possible explanations include neurobiological models of hyper-connectivity, and reduction in 'top-down systems of control' in the neo-cortex (REBUS study) creating 'greater degrees of freedom'; having more available access to a greater range of autobiographical memories, and de-centred appraisals for example. This mirrors theoretical models of psychoanalysis with 'sub-consciousness' being 'brought into awareness. However one of the interpretations of how this was presented by participants was that observations were often quite linear and useful. Whilst the selection of the experiences participants chose to discuss in the interview may be biased toward 'useful content' no-one described void or 'neutral' experiences of for example all the foods they ate as a child, but instead there seemed to be a 'natural' navigation or 'attention placed' toward aspects of long-standing difficulties. However this process was often described as not feeling self-directed, but being in-dialogue with something that felt both familiar yet 'other'. To draw a comparison voice hearing, a relatively frequent symptom associated with psychosis is often experienced as 'familiar yet other', though is largely experienced as either derogatory or providing 'running commentary'. This experience is often described as being heard, or being 'like a thought'. In contrast the experiences reported through Ayahuasca were a range of 'imagery, audio' that were experienced in a 'noetic way' or a felt way, where information was experienced as not being there, and then being there as 'felt sense' or a type of 'knowing' that felt beyond doubt. This is an area that perhaps lends to theories

around embodiment and learning, separate from purely cognitive ‘knowing’ but is an area where further investigation is needed.

The experiences of conversing with a ‘direct intelligence’ described by participants is reminiscent of countless universal archetypes described in religious and spiritual experiences (Luke, 2023), and new data from neuroimaging studies of DMT (Timmerman et al., 2023) perhaps offer neural correlates of spiritual encounters described since time immemorial (Winkelman, 2011). It potentially shows that irrespective of ontological position i.e. whether it is a ‘light being, ‘plant consciousness’ or whether the experiences are simply access to a larger volume of personal and (perhaps external) data or ‘frames of reference’ (as proposed by the Hawkins model of consciousness, 2021), the sense of awe, reverence or feeling of sacredness, often described accompanying these experiences, may act as kind of guarantee of human attention; to place a deep respect and attention toward, which very may well have an evolutionary benefit or practical application as postulated by Piedmont and Wilkins’ Numinous (2019).

References

- Agin-Liebes, G. I., Malone, T., Yalch, M. M., Mennenga, S. E., Ponté, K. L., Guss, J., ... & Ross, S. (2020). Long-term follow-up of psilocybin-assisted psychotherapy for psychiatric and existential distress in patients with life-threatening cancer. *Journal of Psychopharmacology*, 0269881119897615.
- Alase, A. (2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, 5(2), 9-19.
- Anderson, M. R., Miller, L., Wickramaratne, P., Svob, C., Odgerel, Z., Zhao, R., & Weissman, M. M. (2017). Genetic correlates of spirituality/religion and depression: A study in offspring and grandchildren at high and low familial risk for depression. *Spirituality in Clinical Practice*, 4(1), 43.
- Anderson-Schmidt H, Gade K, Malzahn D, Papiol S, Budde M, Heilbronner U, Reich-Erkelenz D, Adorjan K, Kalman JL, Senner F, Comes AL, Flatau L, Gryaznova A, Hake M, Reitt M, Schmauß M, Juckel G, Reimer J, Zimmermann J, Figge C, Reininghaus E, Anghelescu IG, Konrad C, Thiel A, von Hagen M, Koller M, Stierl S, Scherk H, Spitzer C, Folkerts H, Becker T, Dietrich DE, Andlauer TFM, Degenhardt F, Nöthen MM, Witt SH, Rietschel M, Wiltfang J, Falkai P, Schulze TG. (2019) The influence of religious activity and polygenic schizophrenia risk on religious delusions in schizophrenia. *Schizophr Res.* 2019;210:255–261.
- Austin, P., Macdonald, J., & MacLeod, R. (2018). Measuring spirituality and religiosity in clinical settings: A scoping review of available instruments. *Religions*, 9(3), 70.
- Balbuena, L., Baetz, M., & Bowen, R. (2013). Religious attendance, spirituality, and major depression in Canada: A 14-year follow-up study. *The Canadian Journal of*

Psychiatry, 58(4), 225-232.

- Bockrath, M. F., Pargament, K. I., Wong, S., Harriott, V. A., Pomerleau, J. M., Homolka, S. J., ... & Exline, J. J. (2021). Religious and spiritual struggles and their links to psychological adjustment: A meta-analysis of longitudinal studies. *Psychology of Religion and Spirituality*.
- Boiteux, L. (2011). The new brazilian law on drugs and the religious uses of ayahuasca: legal and anthropological aspects. *The internationalization of ayahuasca*. Zurich: Lit Verlag, 263-275.
- Brocki, J. M., & Wearden, A. J. (2006). A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology. *Psychology and health*, 21(1), 87-108.
- Brockmeier, J. (2002). Ineffable experience. *Journal of Consciousness Studies*, 9(9-10), 79-95.
- Bush, H. (2020). Psychedelic therapy: Fresh promise for mental health. *Mental Health Weekly*, 30(4), 5-6.
- Carhart-Harris, R. L., & Friston, K. J. (2019). REBUS and the anarchic brain: toward a unified model of the brain action of psychedelics. *Pharmacological reviews*, 71(3), 316-344.
- Carvalho, C. B., da Motta, C., Pinto-Gouveia, J., & Peixoto, E. (2018). Psychosocial roots of paranoid ideation: The role of childhood experiences, social comparison, submission, and shame. *Clinical Psychology & Psychotherapy*, 25(5), 650-661.
- Carr, B. (2021). Making space and time for consciousness in physics.
- Costandi, M. (2014). A brief history of psychedelic psychiatry. *The Psychologist*, 27(9), 714-715.
- Davis, D. E., Worthington Jr, E. L., Hook, J. N., & Hill, P. C. (2013). Research on religion/spirituality and forgiveness: A meta-analytic review. *Psychology of Religion and Spirituality*, 5(4), 233.
- Elmer, L. D., MacDonald, D. A., & Friedman, H. L. (2003). Transpersonal psychology,

- physical health, and mental health: Theory, research, and practice. *The Humanistic Psychologist*, 31(2-3), 159-181.
- Emerson, A., Ponté, L., Jerome, L., & Doblin, R. (2014). History and future of the Multidisciplinary Association for Psychedelic Studies (MAPS). *Journal of psychoactive drugs*, 46(1), 27-36.
- Evans & Read, (2019) *Breaking Open: Finding a Way Through Spiritual Emergencies*. United Kingdom: Aeon Books Limited.
- Evans, J., Robinson, O. C., Argyri, E. K., Suseelan, S., Murphy-Beiner, A., McAlpine, R., ... & Prideaux, E. (2023). Extended difficulties following the use of psychedelic drugs: A mixed methods study. *PLOS ONE*, 18(10), e0293349.
- Falcon, J. (2021). Situating psychedelics and the war on drugs within the decolonization of consciousness. *ACME: An International Journal for Critical Geographies*, 20(2), 151-170.
- Garraway, H. (2021). *Holistic Cognitive Behaviour Therapy: A Strengths-based Approach Integrating Body, Mind and Spirit Within the Wider Context*. United Kingdom: Pavilion Publishing and Media Limited.
- Gilbert, P. (2009). *The Compassionate Mind: A New Approach to Life Challenges*. London: Constable and Robinson Ltd.
- Glannon, W. (2004). Transcendence and healing. *Medical humanities*, 30(2), 70-73.
- Griffiths, P (1993). "Pure Consciousness and Indian Buddhism," in *The Problem of Pure Consciousness, Mysticism and Philosophy*, Robert Forman (ed.), New York: Oxford University Press, 121–159.
- Griffiths, R. et al. (2011). "Psilocybin Occasioned Mystical-Type Experiences: Immediate and Persisting Dose-related Effects," *Psychopharmacology*, 218(4): 649–665.
- Harris, S. (2014). *Waking Up: A Guide to Spirituality Without Religion*, New York: Simon & Schuster.

- Hofmann SG, Asnaani A, Vonk IJ, Sawyer AT, Fang A. The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognit Ther Res.* 2012;36(5):427-440. doi:10.1007/s10608-012-9476-1
- Jones, R. H. (2022). Secular Mysticism. *Religions*, 13(7), 650.
- Jung, C.G. (1959). The psychology of transference. In H. Read. M. Fordham & G. Adler (Eds) (R. Hull, Trans.). Princeton: Princeton University Press. (Original work published in 1946).
- Jung, C. G. (1997). *Man & His Symbols*. Bantam Doubleday Dell Publishing Group.
- Kang, D. H., Jo, H. J., Jung, W. H., Kim, S. H., Jung, Y. H., Choi, C. H., ... & Kwon, J. S. (2013). The effect of meditation on brain structure: cortical thickness mapping and diffusion tensor imaging. *Social cognitive and affective neuroscience*, 8(1), 27-33.
- Kao, L. E., Peteet, J. R., & Cook, C. C. (2020). Spirituality and mental health. *Journal for the Study of Spirituality*, 10(1), 42-54.
- Kim, J. H., Son, Y. D., Kim, J. H., Choi, E. J., Lee, S. Y., Joo, Y. H., ... & Cho, Z. H. (2015). Self-transcendence trait and its relationship with in vivo serotonin transporter availability in brainstem raphe nuclei: An ultra-high resolution PET-MRI study. *Brain Research*, 1629, 63-71.
- Keltner, D., & Haidt, J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion. *Cognition and emotion*, 17(2), 297-314.
- Kessel, R., Gecht, J., Forkmann, T., Drueke, B., Gauggel, S., & Mainz, V. (2016). Exploring the relationship of decentering to health related concepts and cognitive and metacognitive processes in a student sample. *BMC psychology*, 4(1), 1-10.
- Koenig, H. (2018). *Spiritual care for allied health practice: A person-centered approach*. Jessica Kingsley Publishers.
- La Placa, V., McNaught, A., & Knight, A. (2013). Discourse on wellbeing in research and practice. *International Journal of Wellbeing*, 3(1).
- Le, Y. K., Piedmont, R. L., & Wilkins, T. A. (2019). Spirituality, religiousness, personality as

- predictors of stress and resilience among middle-aged Vietnamese-Born American Catholics. *Mental Health, Religion & Culture*, 22(7), 754-768.
- Letheby, C. (2016). The epistemic innocence of psychedelic states. *Consciousness and cognition*, 39, 28-37.
- Letheby, C (2017). "Naturalizing Psychedelic Spirituality," *Zygon: Journal of Science and Religion*, 52(3): 623–642.
- Letcher, A. (2007). Mad thoughts on mushrooms: Discourse and power in the study of psychedelic consciousness. *Anthropology of Consciousness*, 18(2), 74-98.
- Letcher, A. (2013). Deceptive cadences: A hermeneutic approach to the problem of meaning and psychedelic experience. In *Breaking convention: Essays on psychedelic consciousness*.
- Luke, David (2011) Experiential reclamation and first person parapsychology. *Journal of Parapsychology*, 75 (2). pp. 185-200. ISSN 0022-3387
- Lyons, T., & Carhart-Harris, R. L. (2018). More realistic forecasting of future life events after psilocybin for treatment-resistant depression. *Frontiers in psychology*, 9, 1721.
- McKenna, D.J. (2004) Clinical investigations of the therapeutic potential of ayahuasca: Rationale and regulatory challenges. *Pharmacol. Ther.*, 102, 111–129.
- McKenna, D., & Riba, J. (2016). New world tryptamine hallucinogens and the neuroscience of ayahuasca. *Behavioral Neurobiology of Psychedelic Drugs*, 283-311.
- McKenna, T. (1991). The archaic revival. *San Francisco: HarperSanFrancisco*.
- Miller, L., Warner, V., Wickramaratne, P., & Weissman, M. (1997). Religiosity and depression: Ten-year follow-up of depressed mothers and offspring. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36(10), 1416-1425.
- Murray, M. (2000). Levels of narrative analysis in health psychology. *Journal of health psychology*, 5(3), 337-347.

- Nichols, D. E. (2006). Commentary on: Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance by Griffiths et al. *Psychopharmacology*, *187*(3), 284-286.
- Nutt, D. (2014). Mind-altering drugs and research: from presumptive prejudice to a Neuroscientific Enlightenment? Science & Society series on “Drugs and Science”. *EMBO reports*, *15*(3), 208-211.
- Oxhandler, H. K., Pargament, K. I., Pearce, M. J., Vieten, C., & Moffatt, K. M. (2021). Current Mental Health Clients’ Attitudes Regarding Religion and Spirituality in Treatment: A National Survey. *Religions*, *12*(6), 371.
- Pargament, K. I. (Ed.). (2013). Searching for the sacred: Toward a nonreductionistic theory of spirituality. In K. I. Pargament, J. J. Exline, & J. W. Jones (Eds.), *APA handbook of psychology, religion, and spirituality (Vol. 1): Context, theory, and research* (pp. 257–273). American Psychological Association. <https://doi.org/10.1037/14045-014>
- Pearce, M. J., Pargament, K. I., Oxhandler, H. K., Vieten, C., & Wong, S. (2019). A novel training program for mental health providers in religious and spiritual competencies. *Spirituality in Clinical Practice*, *6*(2), 73.
- Perkins, D., Ruffell, S. G., Day, K., Pinzon Rubiano, D., & Sarris, J. (2023). Psychotherapeutic and neurobiological processes associated with ayahuasca: A proposed model and implications for therapeutic use. *Frontiers in Neuroscience*, *16*, 2255.
- Perkins, D., Ruffell, S. G., Day, K., Pinzon Rubiano, D., & Sarris, J. (2023). Psychotherapeutic and neurobiological processes associated with ayahuasca: A proposed model and implications for therapeutic use. *Frontiers in Neuroscience*, *16*, 2255.
- Pereira, J. C., & Gebara, M. F. (2023). Where the material and the symbolic intertwine: Making sense of the Amazon in the Anthropocene. *Review of International Studies*, *49*(2), 319-338.
- Peoples, H. C., Duda, P., & Marlowe, F. W. (2016). Hunter-gatherers and the origins of religion. *Human Nature*, *27*, 261-282.
- Peres, M. F. P., Kamei, H. H., Tobo, P. R., & Lucchetti, G. (2018). Mechanisms behind religiosity and spirituality’s effect on mental health, quality of life and well-being. *Journal of religion and health*, *57*, 1842-1855.

- Peterson, A., Tagliazucchi, E., & Weijer, C. (2019). The ethics of psychedelic research in disorders of consciousness. *Neuroscience of consciousness*, 2019
- Peterson, J. B. (2002). *Maps of meaning: The architecture of belief*. Routledge.
- Piedmont, R. L. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the five-factor model. *Journal of personality*, 67(6), 985-1013.
- Piedmont, R. L., Fox, J., & Toscano, M. E. (2020). Spiritual Crisis as a Unique Causal Predictor of Emotional and Characterological Impairment in Atheists and Agnostics: Numinous Motivations as Universal Psychological Qualities. *Religions*, 11(11), 551.
- Piedmont, R. L., & Wilkins, T. A. (2019). *Understanding the psychological soul of spirituality: A guidebook for research and practice*. Routledge.
- Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., ... & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews. *A product from the ESRC methods programme Version, 1*(1), b92.
- Powell, A. (2001). Spirituality and science: A personal view. *Advances in Psychiatric Treatment*, 7(5), 319-321. doi:10.1192/apt.7.5.319
- Rennie, B. (2008). Mircea Eliade: 'Secular mysticism' and the history of religions. *Religion*, 38(4), 328-337.
- Roseman, L., Haijen, E., Idialu-Ikato, K., Kaelen, M., Watts, R., & Carhart-Harris, R. (2019). Emotional breakthrough and psychedelics: Validation of the Emotional Breakthrough Inventory. *Journal of Psychopharmacology*, 33(9), 1076-1087.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- Sandage, S. J., Jankowski, P. J., Paine, D. R., Exline, J. J., Ruffing, E. G., Rupert, D., ... & Bronstein, M. (2020). Testing a relational spirituality model of psychotherapy clients' preferences and functioning. *Journal of Spirituality in Mental Health*, 1-21.
- Sanua, V. D. (1969). Religion, mental health, and personality: A review of empirical studies. *The American Journal of Psychiatry*, 125(9), 1203-1213. <https://doi.org/10.1176/ajp.125.9.1203>

- Sessa, B. (2012). *The psychedelic renaissance: Reassessing the role of psychedelic drugs in 21st century psychiatry and society*. Muswell Hill Press.
- Seybold, K. S. (2007). Physiological mechanisms involved in religiosity/spirituality and health. *Journal of behavioral medicine*, 30, 303-309.
- Schuster, C. R. (2006). Commentary on: Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance by Griffiths et al. *PSYCHOPHARMACOLOGY-BERLIN-*, 187(3), 289.
- Skinner, B. F. (1954). Critique of psychoanalytic concepts and theories. *The Scientific Monthly*, 79(5), 300-305.
- Sloshower, J., Guss, J., Krause, R., Wallace, R. M., Williams, M. T., Reed, S., & Skinta, M. D. (2020). Psilocybin-assisted therapy of major depressive disorder using Acceptance and Commitment Therapy as a therapeutic frame. *Journal of Contextual Behavioral Science*, 15, 12-19.
- Smith, T. B., McCullough, M. E., & Poll, J. (2003). Religiousness and depression: evidence for a main effect and the moderating influence of stressful life events. *Psychological bulletin*, 129(4), 614.
- Smith, J. A., & Osborn, M. (2015). Interpretative phenomenological analysis as a useful methodology for research on the lived experience of pain. *British journal of pain*, 9(1), 41–42. <https://doi.org/10.1177/2049463714541642>
- Strassman, R. (2000). *DMT: The spirit molecule: A doctor's revolutionary research into the biology of near-death and mystical experiences*. Simon and Schuster.
- Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: a best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual review of psychology*, 70, 747-770.
- Taussig, M. (2008). *Shamanism, colonialism, and the wild man: A study in terror and healing*. University of Chicago Press.

- Tepper, B. J., Moss, S. E., & Duffy, M. K. (2011). Predictors of abusive supervision: Supervisor perceptions of deep-level dissimilarity, relationship conflict, and subordinate performance. *Academy of Management Journal*, 54(2), 279–294. <https://doi.org/10.5465/amj.2011.60263085>
- Timmermann, C., Roseman, L., Haridas, S., Rosas, F. E., Luan, L., Kettner, H., ... & Carhart-Harris, R. L. (2023). Human brain effects of DMT assessed via EEG-fMRI. *Proceedings of the National Academy of Sciences*, 120(13), e2218949120.
- Timmermann, C., Bauer, P. R., Gosseries, O., Vanhaudenhuyse, A., Vollenweider, F., Laureys, S., ... & Lutz, A. (2023). A neurophenomenological approach to non-ordinary states of consciousness: hypnosis, meditation, and psychedelics. *Trends in Cognitive Sciences*.
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative inquiry*, 16(10), 837-851.
- Villani, D., Sorgente, A., Iannello, P., & Antonietti, A. (2019). The role of spirituality and religiosity in subjective well-being of individuals with different religious status. *Frontiers in psychology*, 10, 1525.
- Watts, R., Day, C., Krzanowski, J., Nutt, D., & Carhart-Harris, R. (2017). Patients’ accounts of increased “connectedness” and “acceptance” after psilocybin for treatment-resistant depression. *Journal of humanistic psychology*, 57(5), 520-564.
- Williams, M. T., & Labate, B. C. (2020). Diversity, equity, and access in psychedelic medicine. *Journal of Psychedelic Studies*, 4(1), 1-3.
- Wolff, M., Betzler, F., Evens, R., Gründer, G., Koslowski, M., Mertens, L. J., & Jungaberle, H. (2020). Learning to Let Go: A Cognitive-Behavioral Model of How Psychedelic Therapy Promotes Acceptance. *Frontiers in Psychiatry*, 11, 5.
- Yamada, A. M., Lukoff, D., Lim, C. S., & Mancuso, L. L. (2020). Integrating spirituality and mental health: Perspectives of adults receiving public mental health services in California. *Psychology of Religion and Spirituality*, 12(3), 276.

Zhang, T. (2023). Critical realism: A critical evaluation. *Social Epistemology*, 37(1), 15-29.

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Appendices

Appendix A: Ethical approval



HEALTH, SCIENCE, ENGINEERING AND TECHNOLOGY ECDA

ETHICS APPROVAL NOTIFICATION

TO Thomas Misselbrook
CC Dr Keith Sullivan
FROM Dr Rebecca Knight, Health, Science, Engineering & Technology ECDA Vice Chair
DATE 01/11/2022

Protocol number: **LMS/PGT/UH/05130**

Title of study: Experience of wellbeing and spirituality in Ayahuasca use

Your application for ethics approval has been accepted and approved with the following conditions by the ECDA for your School and includes work undertaken for this study by the named additional workers below:

Dr Hilary Garraway

General conditions of approval:

Ethics approval has been granted subject to the standard conditions below:

Permissions: Any necessary permissions for the use of premises/location and accessing participants for your study must be obtained in writing prior to any data collection commencing. Failure to obtain adequate permissions may be considered a breach of this protocol.

External communications: Ensure you quote the UH protocol number and the name of the approving Committee on all paperwork, including recruitment advertisements/online requests, for this study.

Invasive procedures: If your research involves invasive procedures you are required to complete and submit an EC7 Protocol Monitoring Form, and copies of your completed consent paperwork to this ECDA once your study is complete.

Submission: Students must include this Approval Notification with their submission.

Validity:

This approval is valid:

From: 01/11/2022

To: 31/08/2023

Please note:

Failure to comply with the conditions of approval will be considered a breach of protocol and may result in disciplinary action which could include academic penalties.

Additional documentation requested as a condition of this approval protocol may be submitted via your supervisor to the Ethics Clerks as it becomes available. All documentation relating to this study, including the information/documents noted in the conditions above, must be available for your supervisor at the time of submitting your work so that they are able to confirm that you have complied with this protocol.

Should you amend any aspect of your research or wish to apply for an extension to your study you will need your supervisor's approval (if you are a student) and must complete and submit form EC2.

Approval applies specifically to the research study/methodology and timings as detailed in your Form EC1A. In cases where the amendments to the original study are deemed to be substantial, a new Form EC1A may need to be completed prior to the study being undertaken.

Failure to report adverse circumstance/s may be considered misconduct.

Should adverse circumstances arise during this study such as physical reaction/harm, mental/emotional harm, intrusion of privacy or breach of confidentiality this must be reported to the approving Committee immediately.

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS

PARTICIPANT INFORMATION SHEET

Title of study

Experience of wellbeing and spirituality in Ayahuasca use

Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the study that is being undertaken and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University's regulation, UPR RE01, 'Studies Involving the Use of Human Participants' can be accessed via this link: <https://www.herts.ac.uk/about-us/governance/university-policies-and-regulations-uprs/uprs> (after accessing this website, scroll down to Letter S where you will find the regulation)

Thank you for reading this.

Who is carrying out this study?

The study is being carried out by Tom Misselbrook, a Trainee Clinical Psychologist, as part of the doctoral qualification in clinical psychology. The study is supervised by Dr Keith Sullivan, (Medical Epidemiologist and Senior Lecturer at the University of Hertfordshire) and Dr Hilary Garraway (Chartered Clinical Psychologist and senior lecturer at the University of Hertfordshire and Kings College London).

I, Tom Misselbrook have both personal and professional interests within the fields of spiritual and psychedelic research, and how these might be holistically included in future healthcare settings.

What is the purpose of this study?

There is renewed interest within modern clinical research as to the role of spirituality within personal wellbeing and mental health, and interest for this to be included in healthcare provision. Experiences with Ayahuasca are often reported to be among the most spiritually significant experiences of people's lives, and the effect on wellbeing is fast becoming an area of significance for healthcare researchers.

The aim of this research is to explore people's experience of legal Ayahuasca use and its relation to personal wellbeing, from a holistic, bio-psycho-social-spiritual, perspective.

Who is eligible?

This project welcomes UK based adults over the age of 18 who have had at least one legal experience of taking Ayahuasca, and who wish to share their experiences relating to wellbeing and spirituality. We recognise that both personal wellbeing and spirituality are subjective concepts. Personal wellbeing may include emotional, mental, physical and spiritual experiences, and may include times of strength and times of struggle. Similarly, spiritual experiences or encounters are subjective and may be described by some as mystical, 'peak experiences' or encounters with the numinous. If these experiences apply to you we would like to hear from you.

Are there any age or other restrictions that may prevent me from participating?

In order to take part you must be 18 years of age or over, be able to speak fluent English, and must be based in the UK

What will happen to me if I take part?

It is completely up to you whether you decide to take part in this study. If you do agree to take part, you will be asked to give your consent to complete an interview as well as provide some demographic information about yourself (e.g., age, ethnicity, education etc). There will be a short 10-15-minute phone call to discuss eligibility. If eligible, and you are still interested we will agree to a time for a virtual interview that will take between 60-90 minutes.

What happens if I change my mind?

It is completely up to you whether you decide to take part in this study. Agreeing to join the study does not mean that you must complete it should you later change your mind. You can withdraw at any time without giving a reason. However, should you decide to withdraw after 4 weeks of taking part in the study we may still need to use your anonymised data in the write-up of the research.

What are the possible disadvantages, risks or side effects of taking part?

During the interview participants will be asked questions relating to experiences of mental, physical and spiritual wellbeing and Ayahuasca use, which could elicit difficult or emotive memories. Questions will always be asked sensitively and thoughtfully. If participation in this research has caused any distress, discomfort or negative feelings, participants will be given an opportunity to debrief with the researcher (Tom Misselbrook). You may also wish to contact immediate sources of support such as your family, friends, GP or a therapist. Further support information can be found in the participants debrief sheet.

Below are details of some organisations that may be useful sources of support if participants have concerns or worries regarding their emotional and psychological wellbeing;

- Your GP - Please consider contacting your GP if you are feeling low or anxious.
- Psychological therapies - If you think that you may benefit from engaging in a talking therapy then you may wish to consider self-referring to your local psychological therapies service, or asking your GP to refer you. To find your nearest service, you can search on the NHS choices.
- Website: [https://www.nhs.uk/ServiceSearch/Psychologicaltherapies\(IAPT\)/LocationSearch/10008](https://www.nhs.uk/ServiceSearch/Psychologicaltherapies(IAPT)/LocationSearch/10008)
- If you're worried about an urgent medical concern, call 111 and speak to a fully trained adviser. Website: <https://www.nhs.uk/pages/home.aspx> Helpline: 0113 825 0000
- Samaritans: This is a 24 hour a day, free and confidential helpline for anyone experiencing any emotional distress. Freephone: 08457 909090 Website: www.samaritans.org

What are the possible benefits of taking part?

Whilst there are no direct benefits to the participant for taking part, it is hoped that data gathered will help inform the emerging field of psychedelic therapy.

The personal benefits of you taking part in this research might be low. Whilst some people might find it useful to talk about, the interview questions follow certain themes relevant to the research, which may limit the conversations you would choose to have. However, there are potential wider benefits of taking part; it is hoped that this study will increase awareness and understanding of wellbeing and spiritual experiences in Ayahuasca use, and to contribute to the larger body of research which is starting to emerge into mainstream scientific research.

How will my taking part in this study be kept confidential?

All information you provide in this study is completely anonymous and confidential and will be used only for research purposes. The only limit to confidentiality would be in the case that any information is given which indicates that you or someone else is at risk of harm. In this case I would need to inform the appropriate agency but would aim to inform you first. The interview will be recorded and transcribed, without any identifying information attached so responses cannot be attributed to any person. There may be some short-anonymised quotes used in publications. Your data will be stored in accordance with the Data Protection Act 2018, and only the research team will have access to the anonymised data. The data will be stored on a password-protected computer.

Audio-visual material

If you agree to take part, as part of the study, interviews will be audio/and or video recorded in order to produce an anonymised written transcript of the information.

What will happen to the data collected within this study?

The audio and visual data collected will be stored electronically, in a password-protected environment on the UH One Drive system. On completion of the study (which is expected to be August 2023) the material will be securely destroyed. The written transcripts of the interview will be anonymised prior to storage, and may be kept up to 5 years for further analysis or further write-up. It is possible that a professional transcription service may be used. If this is utilised, a confidentiality agreement will be employed prior to any transcription of audio data. The anonymised data collected during the study will be used as a part of a Doctoral Clinical Psychology project at the University of Hertfordshire. Research findings will be submitted as part of a doctoral thesis.

In addition, the data collected for the study may be used for publication in a scientific journal. In both instances, all data will be anonymised, and no participant will be identifiable.

Who has reviewed this study?

This study has been reviewed by:

The University of Hertfordshire Health, Science, Engineering and Technology Ethics Committee with Delegated Authority

The UH protocol number is **LMS/PGT/UH/05130**

Factors that might put others at risk

Please note that if, during the study, if any circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities and, under such circumstances, you will be withdrawn from the study.

Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me by email:

Tom Misselbrook- tm18abu@herts.ac.uk

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar at the following address:

Secretary and Registrar
University of Hertfordshire
College Lane
Hatfield
Herts

AL10 9AB

Thank you very much for reading this information and giving consideration to taking part in this study.

Appendix C : Consent form

**UNIVERSITY OF HERTFORDSHIRE
ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF
HUMAN PARTICIPANTS
(‘ETHICS COMMITTEE’)**

Experience of wellbeing and spirituality in Ayahuasca use

I, the undersigned *[please give your name here, in BLOCK CAPITALS]*

NAME:

.....

[please give contact details here, sufficient to enable the investigator to get in touch with you, such as email address]

Phone Number:

Email:

.....
hereby freely agree to take part in the study entitled [*Experience of wellbeing and spirituality in Ayahuasca use*]
.....

(UH Protocol number **LMS/PGT/UH/05130**)

1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of my involvement in the study. I have been told that in the event of any significant change to the aim(s) or design of the study I will be informed, and asked to renew my consent to participate in it.

2 I have been assured that I may withdraw from the study at any time without disadvantage or having to give a reason.

3 In giving my consent to participate in this study, I understand that voice, video or photo-recording will take place and I have been informed of how/whether this recording will be transmitted/displayed.

4 I have been told how information relating to me (data obtained in the course of the study, and data provided by me about myself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used, including the possibility of anonymised data being deposited in a repository with open access (freely available).

5 I understand that if there is any revelation of unlawful activity or any indication of non-medical circumstances that would or has put others at risk, the University may refer the matter to the appropriate authorities.

Signature of participant.....Date.....

Signature of (principal)
investigator.....Date.....

Name of (principal) investigator *[TOM MISSELBROOK]*

.....

Appendix D: Debrief sheet

Experiences of wellbeing and spirituality in Ayahuasca use

Participant Debrief Form

The interview is now complete. Thank you for taking part.

Thank you for taking part in this research. It is greatly appreciated. It is hoped that this research can continue the conversation surrounding wellbeing and spirituality in Ayahuasca use, and improve awareness for further research.

Whilst care has been taken to reduce likelihood of experiencing any lasting distress, it is possible that following the interview you may experience difficult emotions or resurfacing of old memories.

If you feel that you need additional support following your interview, please consider the following options:

- Talk with a trusted partner, family member or friend about how you're feeling and what you might need at this time;
- Your GP will be able to advise you on accessing psychological support in relation to your experience distress, such as a referral to your local Wellbeing Service or Community Mental Health Service;
- If you are feeling depressed or experiencing thoughts of self-harm or suicide, please access emergency crisis support by calling 999 or presenting to A&E. You can also contact the NHS helpline 111 for non-emergency advice.
- You can call the Samaritans for free on 116 123. They are available 24/7 every day of the year.

Once again, thank you so much for your time, effort and energy.

Please let Tom know if you would like to be kept up to date with the progress of this research and any publications that result.

Research Advert 2



Ayahuasca, Spirituality & Wellbeing Research

- Have you previously taken Ayahuasca legally?

-Did you have a spiritual, mystical or 'peak' experience?

-Would you be willing to take part in a 60-90 minute interview about your experience of Ayahuasca, spirituality and wellbeing?

If you would like more information about how you could be involved, please contact Tom at:

tm18abu@herts.ac.uk



Ethics Committee: This study has been approved by University of Hertfordshire Health, science, engineering and technology ethics committee....

Ayahuasca, Spirituality & Wellbeing; Psychology Research Project

Research into Psychedelics is fast becoming an area of interest for mainstream science, particularly within clinical healthcare due to possible therapeutic application. Much of the current research is often from a biomedical or psychiatric perspective, and little research has been done to date from UK clinical psychologists into people's experiences of Ayahuasca use.

This study aims to better understand peoples experience of wellbeing after legal Ayahuasca use, with particular focus on peoples spiritual, mystical, or 'peak' experiences and the role these may have on wellbeing. We recognise that spirituality and personal wellbeing are subjective and that these experiences may include times of emotional, mental, physical and spiritual strengths and struggles.

Requirements to take part

- In order to take part you must be 18 years of age or over
- Have had at least 1 legal experience of Ayahuasca that you are prepared to talk about
- Be able to speak fluent English
- Be currently based in the UK
- Be able to attend a phone call and a virtual interview

What does the study involve?

This is an interview-based study. There will initially be a short 10-15-minute phone call to discuss eligibility. If eligible, you will receive a further information sheet and consent form, and if you are still interested, we will agree to a time for a virtual interview that will take between 60-90 minutes

Who has approved this study?

This study has been approved by the University of Hertfordshire Ethics committee.
It is being overseen by: Dr Keith Sullivan & Dr Hilary Garraway as part of research for the Doctorate in Clinical Psychology

If you are interested in taking part, please email the researcher (Tom) on the contact found below.

tm18abu@herts.ac.uk



please contact Tom at:

tm18abu@herts.ac.uk

Appendix F : Summary of studies quality criteria “Big Tent” (Tracey, 2010)

The enchanted snake and the forbidden fruit: the Ayahuasca ‘fairy tale’ tourist (Dean, 2019)

A phenomenology of subjectively relevant experiences induced by ayahuasca in Upper Amazon vegetalismo tourism, (Wolf, et al.,2020)

<i>Worthy topic</i>	Relevant, timely, significant, Interesting	Relevant, Timely, significant and interesting
<i>Rich Rigour</i>	Theoretical construct (questionable) data sample- broad sample Data collected over a 2 year period. Largest study of its kind. Context important, analysis less so.	Time in the field ensured ‘live’ recall. (Limited sample size)
<i>Sincerity</i>	Sincerity slightly under question due to use of metaphor ‘fairy-tale’ which implies a lack of authenticity, within very old cultural practices, and implies a specific positioning prior to the start of the research which is not named	Yes. Transparency, and declarations of limitations throughout
<i>Credibility</i>	Large data gathered. Does use “thick” description however positionality of researcher calls in to question openness to alternative narratives, or addressing of bias.	Yes. Yes. Very credible methodology and use of available theoretical constructs , between group method rarely used
<i>Resonance</i>	Interesting applicability, may be useful in addressing alternative narrative, though positioning limits this	Hard to gauge transferability due to single Ayahuasca retreat.
<i>Ethical</i>	Lacks some transparency of the authors position	
<i>contribution</i>	Though framed in a way that implies a particular cynicism, or scepticism of legitimacy f peoples attempts to look for something meaningful. this is nonetheless important amongst potential biased sample selection within psychedelic research	Very broad, rich data capture- from bio-psyho-social Robust contribution, good integration of psychological frameworks, tangible models/approach Biomedical and psychological
<i>Coherence</i>	Data presented using researchers own metaphors which reduced clarity	Strong coherence using theoretical underpinning to guide observations drawn

Appendix G: CASP (Critical Appraisal Skills Programme) checklists

PAPER	<i>MEASURING THE SUBJECTIVE: REVISITING THE PSYCHOMETRIC PROPERTIES OF THREE RATING SCALES THAT ASSESS THE ACUTE EFFECTS OF HALLUCINOGENS</i>	<i>MODULATORY EFFECTS OF AYAHUASCA ON PERSONALITY STRUCTURE IN A TRADITIONAL FRAMEWORK.</i>	<i>THE SHIPIBO CEREMONIAL USE OF AYAHUASCA TO PROMOTE WELL-BEING: AN OBSERVATIONAL STUDY</i>
IS THE RESEARCH QUESTION OR HYPOTHESIS CLEARLY STATED?	Yes	yes	yes
IS THE STUDY DESIGN APPROPRIATE FOR THE RESEARCH QUESTION?	yes	yes	Yes Mixed. Multiple measures may be redundant, and conflate findings. No acknowledgement of this.
WAS THE SAMPLE SIZE JUSTIFIED AND ADEQUATE?	yes	Sample size underpowered (N=24), use of ANOVA between 2 groups ideally would have included another 6 participants.	Yes, large sample size
ARE THE STUDY SUBJECTS REPRESENTATIVE OF THE TARGET POPULATION?	Opportunistic sampling, closely related to population in question	Opportunistic sampling, closely related to population in question	Demographics less clear, mixed opportunistic sample
ARE THE STUDY VARIABLES CLEARLY DEFINED AND MEASURED?	yes	yes	yes
ARE THE DATA COLLECTION METHODS RELIABLE AND VALID?	yes	yes	yes
ARE THE STATISTICAL ANALYSES APPROPRIATE FOR THE RESEARCH QUESTION?	yes	Yes, however samples size is under-powered for ANOVA	yes
ARE THE RESULTS PRESENTED CLEARLY AND COMPREHENSIVELY?	yes	yes	yes
ARE THE STUDY LIMITATIONS ACKNOWLEDGED AND DISCUSSED?	yes	yes	yes
ARE THE IMPLICATIONS OF THE FINDINGS DISCUSSED IN RELATION TO THE BROADER CONTEXT?	yes	yes	yes

Appendix H:

Further Reflexivity

The use of Psychedelics for spiritual and ‘therapeutic’ use is common amongst a wide range of cultures globally. There is a complicated history in which European cultures have been historically responsible for suppression and eradication of many such practices, whilst the same cultures are now also advocating for their use as clinical and therapeutic tools, which may include the patenting of compounds for pharmacological purposes. My position as a European researcher is that it is important that the cultures who have discovered these ‘technologies’ if they may be called that, are not then further exploited. (Responsibility as a clinical researcher

Lastly, psychedelics are currently illegal in the UK, including Ayahuasca and its psychoactive component DMT. My position on psychedelic use is that the law must be upheld, but that laws must also be reviewed, and that this can be done with the support of scientific inquiry (Nutt, 2014). I hold an open-mind that Ayahuasca may or may not be beneficial within a western healthcare system, that it may or may-not be ethical, sustainable or suitable to be used within a western context, and that for some individuals it may detrimental or harmful to health and wellbeing, (either directly or indirectly) as well carrying the risk of being fatal. I therefore remain cautious about its use and research. It is important to note that Psychedelics have historically been banned on religious and moral grounds, and in the modern era their use banned largely on political grounds (Nutt, 2014). I advocate for an evidence-based, scientific approach so that Ayahuasca use may be better understood in relation to health, wellbeing, and spiritual use.

Table 9. Exploratory/descriptive narratives

*Causality is not implied, as other factors also played a role in change of belief

Participant	Comments relating to held beliefs prior to Ayahuasca use *	Reason for first use (both stated and interpreted)	Aspects of Health or wellbeing described in the interview	Aspects of Non-ordinary state described experienced as spiritual (non secular)
Cameron	Held non-religious spiritual beliefs, Seeking further understanding/answers	Spiritually curious/seeking	Childhood trauma, relationship, forgiveness, existential questions/meaning	Belief confirmed, life affirming, bigger than just, beings of light, 'noetic' knowing, love
Avery	Absence of religion or spirituality, not a 'conscious' or felt absence	<i>intention to know about the experience itself, there was a curiosity around this otherworldly thing that people were describing, curiosity was there, there was also, people had been saying that it had helped them with difficulties they had been working through, so it was also a 'maybe it can help me with the difficulties I was working through',</i>	Lifestyle, (trauma present-not disclosed), self-relation, self-compassion, acceptance, compassion	Part of Something bigger, embodiment of infinity, compassion connectedness, journey, relational spirituality- trusted friend (- relationship rather than 1 experience- ecophilia)
Willow	Dislike of religion. Some experience from other psychedelics	curious	Relation to self, Connection, lifestyle, acceptance, assertiveness/reduced avoidance	Relationship to plant and self, connecting with a plant consciousness, master plants, which have intelligence
Jesse	" <i>staunch atheist</i> "	Curious, reported reverence	Meaning, direction, lifestyle, connection, acceptance	Part of something bigger, re-connection to religion and 'nature', meaning, direction, reassurance, experiencing intelligent entities or beings, access to another realm
Eli	Considered religion and spiritually as "Hollow, waffy, and linguistically fashionable"	Open/seeking something/ disillusioned	Meaning, trauma, self-compassion, lifestyle, attention,	Plant consciousness, access to a different realm,
Rolo	Agnostic	Curious	Meaning, lifestyle, connection, environmental	Connection with a plant consciousness, ego and body dissolution, re-connection with something ancient and familiar, realising that spirituality from other sources is "real".
Rowan	Reported being " <i>Guarded against spiritual woo</i> "	Low mood	Trauma, low mood, lifestyle, self-acceptance, avoidance behaviours, attention, mindfulness	Connection with a plant consciousness, telepathic communication