

Journal of Psychoactive Drugs



ISSN: 0279-1072 (Print) 2159-9777 (Online) Journal homepage: http://www.tandfonline.com/loi/ujpd20

Ayahuasca Tourism: Participants in Shamanic Rituals and their Personality Styles, Motivation, Benefits and Risks

Veronika Kavenská Ph.D. & Hana Simonová

To cite this article: Veronika Kavenská Ph.D. & Hana Simonová (2015) Ayahuasca Tourism: Participants in Shamanic Rituals and their Personality Styles, Motivation, Benefits and Risks, Journal of Psychoactive Drugs, 47:5, 351-359, DOI: 10.1080/02791072.2015.1094590

To link to this article: http://dx.doi.org/10.1080/02791072.2015.1094590

	Published online: 29 Oct 2015.
	Submit your article to this journal $oldsymbol{\mathbb{Z}}$
hil	Article views: 49
a a	View related articles 🗗
CrossMark	View Crossmark data ☑

Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=ujpd20

Copyright © Taylor & Francis Group, LLC ISSN: 0279-1072 print/2159-9777 online DOI: 10.1080/02791072.2015.1094590



Ayahuasca Tourism: Participants in Shamanic Rituals and their Personality Styles, Motivation, Benefits and Risks

Veronika Kavenská, Ph.D. & Hana Simonová

Abstract — Ayahuasca continues to attract tourists to South America, where there has been a growth in the number of centers offering hallucinogenic ayahuasca experiences. The aims of this study were to (1) discover the reasons foreigners seek this type of experience; (2) define what an ayahuasca experience entails; (3) discover subjective perceptions of ayahuasca's benefits and risks; and (4) describe personality styles of participants using the personality questionnaire (PSSI). Participants (N = 77) were persons who had travelled to South America to use ayahuasca. Among the most frequent motivations were curiosity, desire to treat mental health problems, need for self-knowledge, interest in psychedelic medicine, spiritual development, and finding direction in life. Frequently mentioned benefits included self-knowledge, change in the way one relates to oneself, spiritual development, improved interpersonal relations, overcoming mental and physical problems, and gaining a new perspective on life. Stated potential risks included lack of trust in the shaman or organizer, inaccurate information provided by the shaman or organizer, and exposure to dangerous situations. PSSI results showed that people using ayahuasca scored significantly above the norm on the scales of intuition, optimism, ambition, charm, and helpfulness and significantly lower on the scales of distrust and quietness.

Keywords — ayahuasca, benefits, motivation, personality styles, risks, shaman tourism

Ayahuasca is a purgative hallucinogenic decoction that has been used for thousands of years by South American indigenous peoples in Peru, Colombia, Ecuador, and Brazil for therapeutic, spiritual, and cultural purposes (de Rios and Grob 2005; Metzner 2006). Although various types of plants are added to the ayahuasca decoction based on the methods of individual *curanderos* (healers) and regional tendencies (Mabit, Campos, and Arce 1992), it

is traditionally prepared by combining two plants: the liana *Banisteriopsis caapi* (known as the ayahuasca vine) and the leaves of the shrub *Psychotriaviridis* (chacruna). *Banisteriopsis caapi* contains harmala alkaloids that act as monoamine oxidase inhibitors (MAOI) by suppressing the metabolism of the psychedelic compound dimethyltryptamine (DMT) in the gastrointestinal tract. DMT is present in *Psychotria viridis* (McKenna, Towers, and Abbott 1984).

When used orally, ayahuasca is absorbed into the bloodstream (due to the mutual interaction of the two compounds), where it affects the central nervous system. Consequently, an altered state of consciousness is induced, often accompanied by colorful visual hallucinations (Metzner 2006), reinforced perception, softened auditory

Department of Psychology, Palacký University, Olomouc, Czech Republic.

Please address correspondence to Veronika Kavenská, Department of Psychology, Philosophical Faculty, Palacký University, Olomouc, Vodární 6, 771 80, Czech Republic; email: Veronika.Kavenska@gmail.com

and olfactory sensation, and accelerated mental functions. Studies have suggested that consumption of ayahuasca facilitates access to deeper layers of unconscious, traumatic experiences and repressed memories (Mabit, Giove, and Vega 1996) and allows for new holistic insight and understanding via subsequent integration of conscious and unconscious processes (Winkelman 2001).

Schmid, Jungaberle, and Verres (2010) studied the influence of ayahuasca on specific disease treatment (chronic pain, cancer, asthma, depression, addiction to alcohol, and Hepatitis C). Most participants in the study felt certain that ayahuasca had a positive effect on their disease or illness, due to the fact that it improved coping strategies as well as their overall perception of well-being. Other authors (Barbosa, Giglio, and Dalgalarrondo 2005; Barbosa et al. 2009)suggest that the use of ayahuasca can lead to decreases in both physical pain and intensity of psychiatric symptoms, as well as mental health improvement. The use of ayahuasca can also contribute to self-awareness, personal development, insight into one's life, and the treatment of emotional and physical problems (Winkelman 2005). The longitudinal results from Fábregas et al. (2010) demonstrate that regular users of ayahuasca show no signs of addiction (also see Gable 2007), and that the religious use of ayahuasca may confer increased psychological wellbeing and neuropsychological functioning (Bouso et al. 2012). In the form of the rapeutically induced altered states of consciousness, ayahuasca is being explored as an effective means of treating drug addiction (McKenna 2004; Horák 2013; Thomas et al. 2013; Loizaga-Velder and Verres 2014) and drug-related disorders (Fernández et al. 2014).

PARTICIPATION OF FOREIGNERS IN AYAHUASCA RITUALS

The desire of people to experience shamanic practices first-hand has never been stronger (DuBois 2009). Some indigenous people have reacted to the influx of foreigners by establishing centers offering participation in "authentic" shamanic rituals together with the use of ayahuasca (Fotiou 2010; Tupper 2008, 2009). de Rios (2009) draws attention to the so-called healers (i.e., neo-shamans) who are transforming the traditional ayahuasca rituals into a business operation. It is likely that many of them have not passed the initiation process that includes working with plants, learning from experienced curanderos (healers), and spending time alone in seclusion in the jungle. Therefore, they do not have the required knowledge to deal with the range of effects that ayahuasca can have.

Ayahuasca tourists often undergo these experiences driven by the desire for self-realization and growth. They compensate for something that is missing in their lives and culture; for example, the lack of social traditions and shared values, low self-esteem (de Rios 1994), or the inaccessibility of alternative treatments in their countries (Grunwell 1998; Metzner 2006).

It is important to ensure the safe use of ayahuasca (Grunwell 1998), without which there is a risk of harming participants. Fotiou (2010) states that some curanderos use their shamanic skills for the purpose of healing as well as for harming other people (so-called *brujos*). Luna warns about people who can offer ayahuasca sessions for purely material gain or as a tool for certain sexual favors (in Strassman et al. 2010). There are also documented cases where people have become insane or have died as a result of being served potentially toxic plants (e.g., datura) or from complications with some other disease, like a 19-year-old man from Great Britain who died in April 2014 in Putumayo, Colombia ("Murió británico que tomó yagé en Putumayo" 2014).

Nevertheless, dos Santos (2013) points out that unclear reports do not bring detailed analysis of the cause of severe or even lethal intoxications of the persons who took ayahuasca. Various diseases and incidents or different ways of preparation of ayahuasca brew could predispose participants to higher possibilities of suffering adverse reactions that may lead to death. For this reason, there should be better quality of the forensic/toxicological data if severe intoxications are described in the future.

METHODS

We collected data from the Czech Republic and the Peruvian Amazon (the towns of Tarapoto and Iquitos). The selection of respondents was based on the snowball sampling method and intentional-purposeful choice (Miovský 2006). We approached respondents in Peruby, addressing them in the streets, in tourist locations (restaurants, cafés, hostels), and in centers offering ayahuasca sessions. In the Czech Republic, we had meetings with the respondents at their houses, at Palacký University, in cafés and restaurants, or in the countryside. A condition of participating in the research was the confirmation of a trip to a foreign country with the aim of using ayahuasca and participation in at least one ayahuasca session.

The research used a mixed-methods design. The qualitative section included semi-structured interviews and screening questionnaires. Interviews were recorded and later transcribed. Relevant testimonies relating to a particular question were noted onto a Microsoft Excel program under particular research areas. These testimonies were further reduced, generalized, and coded according to the content and grouped into thematic units (Hendl 2008), from which more general thematic categories were created. As each respondent answered open-ended questions during the interview, their answers can appear in more than one of the final categories.

The quantitative part of the research was based on the Personality Styles and Disorders Inventory (Persönlichkeits-Stil und Störungs Inventar, PSSI; Kuhl and Kazén 2002, 2009), a self-evaluative questionnaire that contains 14 personality styles understood as non-pathological variations of personality disorders as described in psychiatric diagnostic handbooks (DSM-IV, ICD—10). We used a Czech version of the questionnaire containing 140 items (Kuhl and Kazén 2002) and shortened English and Spanish versions of the questionnaire containing 56 items each (Kuhl and Kazén 2009). All versions of the questionnaires have reliability measures that indicate a satisfactory internal structure of the specific scales used for measuring personality styles. Cronbach's alpha ranges are around 0.80 (Kuhl and Kazén 2002) and, in the shorter version of the questionnaire, around 0.73 (Kuhl and Kazén 2009).

Research participants (Table 1) were 47 men and 30 women, of which 47 respondents were from the Czech Republic and 30 respondents were from other European countries, South America, the US and Canada. The respondents were aged between 20 to 78 with an average age of 36.6 years ($\sigma=12.3$). The minimal number of sessions involving ayahuasca was one and the maximum was 130. The average number of sessions was 17.7 ($\sigma=25.9$).

TABLE 1 Description of the Research Sample (N = 77)Variable n Age 20 - 2928 30-39 22 40-49 13 50-59 11 >59 3 Education Elementary 1 Apprentice 4 High School 30 42 University Marital status Single 42 Married 21 Divorced 12 Widowed 2 Number of ayahuasca sessions 9 2-521 6 - 1016 11 - 2012 21 - 306 31-50 5 8 > 50

RESULTS

The results of the qualitative part of the research are based on the analysis of interviews concerning motivation, benefits and risks, or negative experiences associated with travelling abroad for the purpose of using ayahuasca.

Motivation

Respondents reported several reasons for undertaking trips to the Amazon or elsewhere for the purpose of ayahuasca use. Curiosity and a desire for adventure were mentioned by almost half of the participants, which points to a tendency to seek new and unusual experiences. One third of respondents undertook the experience on the basis of wishing to overcome psychological problems that included depression, anxiety, fear, a need for reliving and treating life trauma or revealing unconscious material with the possibility to then process it. Ayahuasca was often considered as a medium capable of facilitating personal therapy and mental cleansing, which demonstrated a faith in the curative properties of ayahuasca. One third of respondents travelled for the purpose of self-knowledge accompanied by the desire for deep self-experience and the possibility of subsequent self-development. Almost one quarter of respondents stated a general interest in psychedelic medicine and therapy as a motivating factor and their possible use for personal development, treatment, research and discovering altered states of consciousness, which, according to respondents, enabled them to view reality from new perspectives and bring about personal transformation. The desire to learn how to work with plants or to learn from plants was also mentioned as a motivation. One quarter of respondents stated their desire for spiritual development as a primary motivation. They wanted to meet God or something beyond, to connect with a higher consciousness and discover an "invisible and intangible" world or "parallel" reality, to find the meaning of life, or to experience a symbolic rebirth. Some respondents also expected clarification on the direction of their lives or to find answers to unanswered questions. The need to shift from a place or move in a certain life direction, the desire to "overcome fear and live the way one wants," or the need for a radical change of lifestyle were also mentioned. Ayahuasca was also considered to be a means of creating insight, or as a way to obtain a life with a sense of fulfillment. The decision to travel and use ayahuasca was often spontaneous or intuitive, accompanied by a sense of "I need to go there" suppressing rational thinking. Several respondents considered the experience with ayahuascato be a "shortcut," or a way to accelerate their understanding of what is important in their life. Treatment of personal relations in terms of understanding and a subsequent improvement of those relations was also one of the motivations. Other motivations were the wish to understand and process a complicated relationship break-up or to cope with a partner's death.

There were also statements about the desire to *overcome* an addiction (for example, marijuana, tobacco, and other drugs), and a wish to *cure somatic problems*. Ayahuasca was considered to be a means for treating psychosomatic diseases using alternative medicine.

Benefits

Most respondents perceived their experience with ayahuasca as enriching, particularly on the personal level. The approach towards oneself in terms of deeper selfknowledge accompanied by an effective process of selfdevelopment was evaluated positively. Self-acceptance that led to a better relation with oneself resulting in more natural behavior and self-confidence was often mentioned. In relation to ayahuasca use, respondents experienced a feeling of inner serenity, independence and responsibility for oneself and one's life. Almost half of the respondents talked about the development of spirituality, (re)discovering God or the purpose of life. Most of them reported a realization of something beyond the normal confines of human experience, and this realization often evoked a sense of trust and respect. Statements about the materialistic society we live in and the need for a non-materialistic life were frequent. Respondents evaluated positively the development of intuition, an understanding of world unity, and a mutual interconnectedness of every living thing. Almost half of the respondents mentioned overall improvements in relationships with other people. Relationships were seen as improved due to the development of empathy, compassion, tolerance, and honesty with those people. Learning about real and unconditional love and gratitude was considered to be positive as well. Half of the respondents talked about overcoming psychological problems that were negatively influencing their lives. According to the testimonies, the use of ayahuasca led to the elimination of depression, anxiety, suicidal thoughts, and panic attacks.

In general, the research participants had a better sense of self-control over their experiences and behavior, and were able to overcome negative behavioral patterns. They also had an opportunity to relive unconscious memories and to cure traumas. The respondents appreciated the opportunity to overcome the fear of death or the future, eliminating communication problems, and overall mental cleansing. The elimination of so-called "inner demons" was also frequently mentioned. One third of the respondents positively evaluated a detached view of life and the change in attitudes and values that it brings-"career and money are not that important," humbleness, the ability to realize the essential things and not being concerned with trivialities. One quarter of respondents confirmed having improved health, including a sense of bodily cleansing (i.e., "physical detox"), pain relief, and weight loss. According to the subjective impressions of respondents, the use of ayahuasca led to alcohol or drug abstinence or to the cure

of addictions, to a healthy diet, and also to better care for one's body. One fifth of participants associated the experience with gaining *life satisfaction and happiness*, a sense of liberation, and vigor for life. *Clarification on the direction of one's life* was mentioned as beneficial—"what one wants to do in personal and professional life," in addition to gaining an *interconnection with nature*, a higher sensitivity towards nature, and a tendency towards spending more time in nature with a sense of safety and confidence. Some respondents also mentioned the *development of new creative* skills in painting or music.

Risks and Negative Experiences

Almost all respondents stated that ayahuasca sessions were often accompanied by unpleasant experiences, ranging from the bad taste of ayahuasca along with unpleasant physical reactions such as nausea, vomiting, diarrhea, or the inability to vomit, to unbearable visions and a fear of death, of darkness, of "meeting the demon." There were also fears about session length—the feeling that "I cannot stand it any longer," or the fear of overdose. However, these experiences were not evaluated as undesirable but rather as meaningful, with a potentially positive life impact. Therefore, we do not consider the aforementioned experiences to be risks. They were later highly appreciated by respondents. There was one exception—a female respondent who described her experience with ayahuasca as traumatizing.

Although most respondents considered the use of ayahuasca to be safe, certain risks and negative experiences were mentioned. The major emphasis was made on the choice of a reliable and experienced shaman who could guarantee a safe course for the entire ayahuasca session. Lack of confidence in the shaman was accompanied by a fear of losing control, fear of death, fear of a mental disease manifestation, or fear of rape. Some respondents mentioned that, during the session, the shaman was tired, drunk, or that he even fell asleep. They said that the ayahuasca session was not sufficiently controlled or that the shaman did not have enough information about the participants because the whole session was arranged via a mediator. According to some respondents, the shaman/mediator charged a large amount of money for the ayahuasca session or for facilitating such a session. Some respondents mentioned the fact that the shaman tried to seduce female participants involved in a session. One female respondent stated that she had sex with the shaman during her stay. According to her testimony, this later led to an outbreak of depression and anxiety accompanied by an unpleasant feeling of mutual connection. Language barriers were also mentioned, as well as the fear of whether or not the shaman would serve ayahuasca or possibly something else. Some respondents stated that, during their experience, they were exposed to potentially dangerous situations such as the threat of assault by indigenous people or a conflict with

indigenous people, the fear of being exposed to wild animals inhabiting the jungle (insects, snakes, and spiders), unsanitary and unsuitable conditions in the venues prepared for ayahuasca sessions, or the use of ayahuasca in dangerous locations (e.g., high cliffs). The lingering effects of ayahuasca after the end of a session were sometimes considered negative. Some respondents stated that they did not trust the expedition organizer, or that they had received distorted information. Sometimes they were unaware of the exact purpose and course of the planned expedition, or even that the place did not provide what was promised. Some respondents concluded that there were too many participants involved in the ayahuasca session to make it meaningful or satisfying. According to some testimonies, it can be difficult for Western people to integrate their experience with ayahuasca into their everyday life.

Participants' Personality Styles

The long (Czech) and short (English/Spanish) versions of PSSI were applied on people who used ayahuasca. Two of 77 questionnaires were excluded because of incomplete answers. Raw scores of the personality style subscales of both long and short versions were converted to T-scores using population norms from a German sample; the long version of the PSSI (n = 1026; Kuhl and Kazén 2002) and the short version of PSSI (n = 1227; Kuhl and Kazén 2009). A one-sample Z-test was used to compare the mean of the research group (n = 75) with a standardized average value 50, which represents the German population sample,

with a standard deviation of 10 and a zone of norms ranging from 40–60 (Kuhl and Kazén 2002).

There were significant differences between the research group and the population sample ($\emptyset = 50$, $\sigma = 10$) on several scales (Table 2). The research group had a significantly higher score compared to the population group on the scales of intuition, optimism, ambition, charm, and helpfulness (altruism). The participants scored significantly lower on the scale of distrustful and quiet (passive) personality style.

The effect size (Cohen 1988) was significant on the scales of intuition, optimism, charm and helpfulness, ambition, distrust, and quietness.

According to the personality interaction system (PSI), the intuitive, charming, optimistic, and ambitious personality style represents a positive affect that can lead to inhibition of analytic thinking and evoke intuitive behavior (Kuhl and Kazén 2002). This combination of styles may explain the difference between the population mean and the mean of the research group on the scale of intuition, where three-quarters of respondents scored significantly higher.

Significantly higher scores on the scale of intuition show sensitivity towards seemingly "irrational" schemes of thinking and behavior such as telepathy or a "sixth sense." Pathologically escalated behavior of this type can lead to schizotypal personality disorder (Kuhl and Kazén 2002).

The intuitive style positively correlates with the scale of openness in the NEO Big Five personality questionnaire (Kuhl and Kazén 2009). According to the respondents in

TABLE 2
Results of the One-Sample Z-Test on the Personality Styles and Disorders Inventory Scales

	Mean of the						
	population	Standard	Mean of the				Cohen's
Scales	(T-score)	deviation	sample (T-score)	n	z-value	p	d
Assertive	50	10	51.71	75	1.48	.14	0.35
Distrustful	50	10	47.04	75	-2.56	< 0.05	-0.62*
Aloof	50	10	49.77	75	-0.2	.84	-0.05^{*}
Self-critical	50	10	48.99	75	-0.87	.38	-0.2^{*}
Conscientious	50	10	51.48	75	1.28	.20	0.3
Intuitive	50	10	66.07	75	13.92	< 0.001	>15 ***
Optimistic	50	10	59.29	75	8.05	< 0.001	5.04***
Ambitious	50	10	53.17	75	2.75	< 0.01	0.67**
Critical	50	10	51.04	75	0.9	.37	0.21
Loyal	50	10	50.43	75	0.37	.71	0.09
Spontaneous	50	10	51.65	75	1.43	.15	0.33
Charming	50	10	56.05	75	5.24	< 0.001	1.52***
Quiet	50	10	46.44	75	-3.08	< 0.01	-0.76*
Helpful	50	10	53.73	75	3.23	< 0.01	0.8***

^{*}Adverse Effect

^{**}Intermediate Effect.

^{***}Large Effect.

our research, curiosity and desire for adventure were the most frequently reported motivations to use ayahuasca.

Significantly lower levels on the scales of a distrustful and a quiet style manifest higher credulity and a primarily positive setting for social relations and positive life attitude. Significantly higher levels on the scale of optimism could lead to chronic enthusiasm and an inability to perceive any negative aspects of self-experience or the experiences of others or the inability to deal with conflicts and problems (Kuhl and Kazén 2002).

The tendency of the respondents to be trustful and optimistic may point to their expectation of good outcomes or a potentially naïve attitude, and thus a possible carelessness in decision making. Prudence and a certain degree of mistrust during the planning of the use of ayahuasca would be desirable in order to avoid inconveniences. Some authors have written about the abuse of unsuspecting tourists (see de Rios 2009). Excessive trust among ayahuasca tourists may lead to insufficient information about the persons who offer ayahuasca and may end in exploitation of tourists.

Respondents scored significantly higher on the scale of helpful style, which is characterized by a willingness to help, empathize, and engage within a social context. In a pathological form, it can be accompanied by an excessive self-sacrifice (Kuhl and Kazén 2002).

Significantly higher levels on the scale of charming style may be connected to the tendency to help others. The results show that people in our research tend to be emphatic, pleasant, and helpful to others.

DISCUSSION

The qualitative part of the research provides an overview of motivations for travelling abroad for the purpose of using ayahuasca, the perceived benefits of taking it, and the risks involved. The main motivation was curiosity, a desire for self-knowledge, and the treatment of mental and emotional problems. There was also an interest in psychedelic medicine, spiritual development, and for seeking a new direction in life. It was often an intuitive or spontaneous decision, perceiving ayahuasca as a "shortcut," and as a way of solving partnership and family problems, addictions, and disease treatment. These findings, however, correspond to a certain extent with an earlier study conducted by Winkelman (2005).

Evaluations of the experience corresponded largely with the respondents' expectations. The most frequently mentioned benefit from the use of ayahuasca was the overall change in relation towards oneself, including self-knowledge and self-development, self-acceptance and self-love, mental balance, independence and responsibility for one's own life. The use of ayahua scaled to a deeper spirituality of being beyond oneself, and to finding life meaning or changes in life values. Respondents often talked about emotional, mental, and physical cleansing and improved

relationships with other people. A detached view of life, satisfaction, and clarification of life direction were also often mentioned. These findings align with the results of previous studies (Barbosa, Giglio, and Dalgalarrondo 2005; Winkelman 2005; Trichter 2006–7; Barbosa et al. 2009; Schmid, Jungaberle, and Verres 2010).

According to participants' testimonies, ayahuasca seems to be an effective means for treatments, cures, and personal development. It is also important to mention the limitations of this study. The testimonies of respondents are subjective and they cannot correspond fully with an objectively observed reality. However, one of the main motivations to travel in order to experience ayahuasca was a sense of mental discomfort. Therefore, the positive effect of using ayahuasca is considered beneficial, regardless of any objective factors.

Another factor that could lead to the distortion of results is the time delay since the last experience with ayahuasca. Some interviews were conducted the day after the use of ayahuasca, whereas others had a delay of weeks, months, or even years after the last session.

Most respondents regarded the experience as a safe one. Previous studies also demonstrated improvement in people's physical health related to the use of ayahuasca (Schmid, Jungaberle, and Verres 2010) or the cure of addictions (Mabit and Sieber 2006; McKenna 2004) and confirmed the safe use of ayahuasca without any potential of addiction (Gable 2007; Fábregas et al. 2010). This corresponds with the testimonies of respondents in our study. We are aware of the limitations resulting from restricted access to people for whom the use of ayahuasca could cause harm and who could be avoiding studies such as this for personal reasons.

The most frequently mentioned negative experience was the lack of trust in a shaman or "bad vibes" from a shaman, which, according to testimonies, carries the risk of potential harm to participants of ayahuasca rituals. The testimonies show that it is important to have sufficient information about the person offering an ayahuasca session, and thus prevent exposing themselves to potentially dangerous situations and unpleasant consequences.

Some respondents mentioned potentially dangerous or harmful situations they had to face during their travelling or during the use of ayahuasca. We believe that the mediator/shaman should have a duty to ensure the safety of participants during the whole expedition, including the use of ayahuasca, and they should provide participants with information regarding any possible negative impacts resulting from ignoring or disregarding the recommendations of safe use. It is important to administer ayahuasca in places that do not pose risks to people's health or life, and to organize sessions with an appropriate number of participants. It is also important to have the situation constantly under control and to ensure the safety of the participants after the ceremony has been completed. The

shaman/mediator should know the health and mental state of a person and if such a state could be a contraindication for the use of ayahuasca and could threaten the physical and mental health of the person. Some respondents stated that they did not trust the expedition organizer or that the mediator/shaman provided only partial or wholly distorted information. The participant of an ayahuasca ritual should have the right to truthful answers to all questions regarding the trip as well as the use of ayahuasca itself. However, the current legal situation complicates an open discussion (in Strassman et al. 2010). Nevertheless, there are movements to create protocols for the therapeutic use of psychedelics (Labate and Cavnar 2011).

According to some testimonies, it can be difficult for Westerners to integrate their experience with ayahuasca into their everyday life. Successful integration is important in order to eliminate the sense of confusion, depersonalization and, in extreme cases, the outbreak of mental illnesses such as depression or psychosis (Grunwell 1998; Lewis 2008). It would be desirable to discuss ayahuasca experiences afterwards with trained therapists.

If some persons decide to experience ayahuasca, they should consider all of the previously mentioned risks. Most respondents stated that the shaman or organizer did provide some recommendations and guidance. This involved mostly reference to diet compliance and sexual abstinence before, during, and after the use of ayahuasca. Many authors write about the importance of compliance with strict rules and diet (Grunwell 1998; Mabit 2002; de Rios and Grob 2005; Mabit and Sieber 2006; de Rios 2009; Kavenská 2013). We believe in the importance of distributing information among people who are seeking an experience with ayahuasca in order to avoid the possible damage caused by the negligent administration of ayahuasca or abuse on the part of the shaman/ mediator.

The quantitative part of the research focused on the personality styles of participants. There were differences between the research group and the population sample on seven scales. The research group had significantly higher scores compared to the population group on the scales of intuition, optimism, ambition, charm, and altruism. The participants scored significantly lower on the scales of distrustful and quiet personality styles.

There are some similarities between our research and the study of Bouso et al. (2012), where the ayahuascausing subjects scored significantly higher on the selftranscendent dimension (altruism, idealism) and significantly lower in harm avoidance compared to the control group. Grob et al. (1996) also revealed that ayahuasca consumers scored significantly lower on the harm avoidance dimension. Barbosa et al. (2009) noted a change among members of the Church of Santo Daime in Brasil towards more optimism and confidence after six months of their first ayahuasca ritual experience. Grob et al. (1996) have reported that ayahuasca users tend to more gregariousness and uninhibited optimism than the control group. These findings correspond with the results of the PSSI in our study.

The intuitive personality style was common among respondents. The question is whether this type of personality seeks the ayahuasca experience more often than the general population. Testimonies of some respondents point to this. They mention the occurrence of unusual experiences they had before they used ayahuasca (for example, out-of-body experience, sensitivity to various types of energies, contact with UFOs) It is also possible that ayahuasca contributed to the development of such a personality type. Another question is whether these are real psychopathological symptoms. None of the respondents of our study talked about mental problems of this kind. On the contrary, they considered their intuitive abilities an important part of their lives.

There are some other studies focusing on the possible psychopathological symptoms associated with the use of ayahuasca that support our findings. Bouso et al. (2012) have reported that ayahuasca users showed lower presence of psychopathological symptoms compared to the control group. Grob et al. (1996) did not find evidence of psychopathology in a group of ayahuasca users.

One limitation of our study is that the results of PSSI questionnaires were compared with a normative German sample (original manuals of PSSI; Kuhl and Kazén 2002, 2009), but the origin of participants in our study was variable. The fact that the participants were from various cultures could have influenced the results, because each culture has its typical characteristics of perception and behavior.

The results of PSSI questionnaires cannot offer conclusive evidence of the use of ayahuasca and its influence over the discovered personality types or if it is typical for people with the previously mentioned styles to seek these types of experiences. It may be beneficial to assess personality styles before and after the experience with ayahuasca.

CONCLUSION

People with ritual ayahuasca experience in our sample were often intuitive and pleasant with an optimistic, active, and ambitious attitude toward life, were open to alternative lifestyles and possessed pro-social empathetic and altruistic tendencies. The testimonies of respondents detail that the spiritual context of travelling to the Amazon to partake in the ceremony results in a profound and distinct positive

change in experiences and behavior towards self, others, surroundings, and to life in general. It is possible to presume that when abiding by the rules for ayahuasca use, the ritual use under the guidance of experienced curanderos is safe and has a positive impact on people on a bio-psycho-socio-spiritual level.

The Ministry of Health in Peru has begun to recognize the wide potential of indigenous shamanic healers (Mabit and Sieber 2006). In Western society, altered states of consciousness are often perceived as negative or antisocial forms of behavior (Shanon 2002; de Rios

and Grob 2005; Mabit and Sieber 2006). The results of this research suggest the potential for a more positive role for hallucinogenic plants in society. However, for a more precise assessment of the curing potential of ayahuasca, it is necessary to change the current research paradigm and go beyond the conventional models of treatments and investigate the teaching of past and distant cultures (de Rios and Grob 2005). With increasing globalization, people from the West will continue seeking various opportunities to use ayahuasca. Therefore, we believe it is important to deal with this phenomenon and we consider it necessary to conduct further research in this area.

REFERENCES

- Barbosa, P. C. R., I. M. Cazorla, J. S. Giglio, and R. Strassman. 2009. A six-month prospective evaluation of personality traits, psychiatric symptoms and quality of life in Ayahuasca-naïve subjects. *Journal of Psychoactive Drugs* 41 (3):205–12. doi:10.1080/ 02791072.2009.10400530.
- Barbosa, P. C. R., J. S. Giglio, and P. Dalgalarrondo. 2005. Altered states of consciousness and short-term psychological after-effects induced by the first time ritual use of ayahuasca in an urban context in Brazil. *Journal of Psychoactive Drugs* 37 (2):193–201. doi:10.1080/ 02791072.2005.10399801.
- Bouso, J. C., D. González, S. Fondevila, M. Cutchet, X. Fernández, P. C. R. Barbosa, M. Á. Alcázar-Córcoles, W. S. Araújo, M. J. Barbanoj, J. M. Fábregas, J. Riba, and M. Mazza. 2012. Personality, psychopathology, life attitudes and neuropsychological performance among ritual users of ayahuasca: A longitudinal study. *PLoS ONE* 7 (8):e42421. doi:10.1371/journal.pone.004 2421.
- Cohen, J. 1988. Statistical power analysis for the behavioral sciences. 2nd ed. Hillsdale, NJ: Erlbaum.
- de Rios, M. D. 1994. Drug tourism in the Amazon: Why Westerners are desperate to find the vanishing primate. *Omni* 16 (4):6–6.
- de Rios, M. D. 2009. The psychodelic journey of Marlene Dobkin de Rios: 45 years with shamans, ayahuasqueros, and ethnobotanists. Vermont: Park Street Press.
- de Rios, M. D., and C. S. Grob. 2005. Editors' introduction: Ayahuasca use in cross-cultural perspective. *Journal of Psychoactive Drugs* 37 (2):119–21. doi:10.1080/02791072.2005.10399790.
- dos Santos, R. G. 2013. A critical evaluation of reports associating ayahuasca with life-threatening adverse reactions. *Journal of Psychoactive Drugs* 45 (2):179–88. doi:10.1080/02791072.2013.785846.
- DuBois, T. A. 2009. Úvod do šamanismu [An Introduction to Shamanism]. Praha, Czech Republic: Volvoxglobator.
- Fábregas, J. M., D. González, S. Fondevila, M. Cutcheta, X. Fernández, P. C. R. Barbosa, M. Á. Alcázar-Córcoles, M. J. Barbanoj, J. Riba, and J. C. Bouso. 2010. Assessment of addiction severity among ritual users of ayahuasca. *Drug and Alcohol Dependence* 111:257–61. doi:10.1016/j.drugalcdep.2010.03.024.
- Fernández, X., R. G. dos Santos, M. Cutchet, S. Fondevila, D. González, M. Á. Alcázar, J. Riba, J. C. Bouso, and J. M. Fábregas. 2014. Assessment of the psychotherapeutic effects of ritual ayahuasca use on drug dependency: A pilot study. In *The therapeutic use of ayahuasca*, ed. B. C. Labate and C. Cavnar, 183–96. Berlin: Springer.

- Fotiou, E. 2010. Encounters with sorcery: An ethnographer's account. Anthropology and Humanism 35 (2):192–203. doi:10.1111/anhu.2010.35.issue-2.
- Gable, R. S. 2007. Risk assessment of ritual use of oral dimethyltryptamine (DMT) and harmala alkaloids. *Addiction* 102:24–34. doi:10.1111/add.2007.102.issue-1.
- Grob, C. S., D. J. McKenna, J. C. Callaway, G. S. Brito, E. S. Neves, G. Oberlaender, O. L. Saide, E. Labigalini, C. Tacla, C. T. Miranda, R. J. Strassman, and K. B. Boone. 1996. Human psychopharmacology of hoasca, a plant hallucinogen used in ritual context in Brazil. *The Journal of Nervous & Mental Diseases* 184 (2):86–94. doi:10.1097/00005053-199602000-00004.
- Grunwell, J. N. 1998. Ayahuasca tourism in South America. Multidisciplinary Association for Psychedelic Studies 8 (3):59–62.
- Hendl, J. 2008. Kvalitativnívýzkum: Základníteorie, metodyaaplikace [Qualitative research: Basic theories, methods and applications]. Praha, Czech Republic: Portál.
- Horák, M. 2013. Dům, kde se zpívá: Rehabilitacedrogovězávislýchtradič nídomorodoumedicínouperuánskéAmazonie [The house where they sing: Rehabilitation of the drug addictive people by a traditional indigenous medicine of the Peruvian Amazon]. Brno, Czech Republic: Mendelova Universita.
- Kavenská, V. 2013. Tradičnímedicína Jižní Ameriky a jejívyužití v psychoterapii [Traditional medicine of South America and its use in psychotherapy]. Olomouc, Czech Republic: Univerzita Palackého v Olomouci.
- Kuhl, J., and M. Kazén. 2002. PSSI: Inventářstylůosobnosti a poruchosobnosti [Personality Styles and Disorders Inventory]. Praha, Czech Republic: Testcentrum.
- Kuhl, J., and M. Kazén. 2009. Persönlichkeits-Stil-und-Störungs-Inventar (PSSI): Handanweisung, 2. Aufl [Personality Styles and Disorders Inventory: Manual, 2nd ed.]. Göttingen, Germany: Hogrefe.
- Labate, B. C., and C. Cavnar. 2011. The expansion of the field of research on ayahuasca: Some reflections about the ayahuasca track at the 2010 MAPS "Psychedelic Science in the 21st Century" conference. *International Journal of Drug Policy* 22:174–78. doi:10.1016/ j.drugpo.2010.09.002.
- Lewis, S. E. 2008. Ayahuasca and spiritual crisis: Liminality as space for personal growth. Anthropology of Consciousness 19 (2): 109–133.
- Loizaga-Velder, A., and R. Verres. 2014. Therapeutic effects of ritual ayahuasca use in the treatment of substance dependence: Qualitative results. *Journal of Psychoactive Drugs* 46:63–72. doi:10.1080/ 02791072.2013.873157.

Mabit, J. 2002. Blending traditions: Using indigenous medicinal knowledge to treat drug addiction. *Multidisciplinary Association for Psychodelic Studies* 12 (2):25–32.

- Mabit, J., J. Campos, and J. Arce. 1992. Consideraciones acerca del brebaje ayahuasca y perspectivas terapéuticas [Considerations about the brew ayahuasca and therapeutic perspectives]. Revista De Neuro-Psiquiatría 2:118–31.
- Mabit, J., R. Giove, and J. Vega. 1996. Takiwasi: The use of Amazonian shamanism to rehabilitate drug addicts. In *Yearbook of cross-cultural medicine and psychotherapy*, ed. W. Andritzky. Berlin: International Institute of Cross-Cultural Therapy Research.
- Mabit, J., and C. Sieber. 2006. The evolution of a pilot program utilizing ayahuasca in the treatment of drug addictions. *Shaman's Drum Journal* 73:23–31.
- McKenna, D. J. 2004. Clinical investigations of the therapeutic potential of ayahuasca: Rationale and regulatory challenges. *Pharmacology & Therapeutics* 102:111–29. doi:10.1016/j.pharmthera.2004.03.002.
- McKenna, D. J., G. H. N. Towers, and F. Abbott. 1984. Monoamine oxidase inhibitors in South American hallucinogenic plants: Tryptamine and β-carboline constituents of Ayahuasca. *Journal of Ethnopharmacology* 10:195–223. doi:10.1016/0378-8741 (84)90003-5.
- Metzner, R. 2006. Sacred vine of spirits: Ayahuasca. Rochester, NY: Park Street Press.
- Miovský, M. 2006. Kvalitativnípřístup a metody v psychologickémvýzkumu [Qualitative approach and methods in the psychological research]. Praha, Czech Republic: Grada Publishing.
- Schmid, J. T., H. Jungaberle, and R. Verres. 2010. Subjective theories about (self-)treatment with ayahuasca. Anthropology of Consciousness 21 (2):188–204. doi:10.1111/anoc.2010.21.issue-2.
- Shanon, B. 2002. The antipodes of the mind: Charting the phenomenology of the ayahuasca experience. Oxford: Oxford University Press.

- Strassman, R., S. Wojtowicz, L. E. Luna, and E. Frecska. 2010. *Vnitřní cesty do vnějšího vesmíru* [Inner paths to outer space]. Praha, Czech Republic: Dybbuk.
- Thomas, G., P. Lucas, N. R. Capler, K. W. Tupper, and G. Martin. 2013. Ayahuasca-assisted therapy for addiction: Results from a preliminary observational study in Canada. *Current Drug Abuse Reviews* 6 (1):30–42. doi:10.2174/1573399811309 9990003.
- Trichter, S. 2006–7. Ayahuasca and spirituality: Empirical research on experiencing the divine. MAPS 17:23.
- Tupper, K. W. 2008. The globalization of ayahuasca: Harm reduction or benefit maximization? *International Journal of Drug Policy* 19 (4):297–303. doi:10.1016/j.drugpo.2006.11.001.
- Tupper, K. W. 2009. Ayahuasca healing beyond the Amazon: The globalization of a traditional indigenous entheogenic practice. Global Networks 9 (1):117–36.
- Winkelman, M. 2001. Alternative and traditional medicine approaches for substance abuse programs: A shamanic perspective. *International Journal of Drug Policy* 12 (4):337–51. doi:10.1016/ S0955-3959(01)00100-1.
- Winkelman, M. 2005. Drug tourism or spiritual healing? Ayahuasca seekers in Amazonia. *Journal of Psychoactive Drugs* 37 (2):209–18. doi:10.1080/02791072.2005.10399803.

Electronic resources

Murió británico que tomó yagé en Putumayo [A British man died in Putumayo after taking yagé]. (April 28, 2014). http://www.eltiempo.com/colombia/otraszonas/murio-ingles-en-putumayo-tras-ingerir-droga-alucinogena_13891875-4 (accessed May 6, 2014 from El Tiempo website).