

Ayahuasca in Adolescence: A Preliminary Psychiatric Assessment[†]

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Abstract—Ayahuasca is believed to be harmless for those (including adolescents) drinking it within a religious setting. Nevertheless controlled studies on the mental/ psychiatric status of ritual hallucinogenic ayahuasca concoction consumers are still lacking. In this study, 40 adolescents from a Brazilian ayahuasca sect were compared with 40 controls matched on sex, age, and educational background for psychiatric symptomatology. Screening scales for depression, anxiety, alcohol consumption patterns (abuse), attentional problems, and body dysmorphic disorders were used. It was found that, compared to controls, considerable lower frequencies of positive scoring for anxiety, body dysmorphism, and attentional problems were detected among ayahuasca-using adolescents despite overall similar psychopathological profiles displayed by both study groups. Low frequencies of psychiatric symptoms detected among adolescents consuming ayahuasca within a religious context may reflect a protective effect due to their religious affiliation. However further studies on the possible interference of other variables in the outcome are necessary.

Keywords—adolescence, ayahuasca, hallucinogen, psychopathology, religion, scales

Ayahuasca is a hallucinogenic concoction of plants used as a psychoactive ritual sacrament in ceremonies of the syncretic churches União do Vegetal (UDV) and Santo Daime. In Brazil, law has sanctioned the use of ayahuasca within the context of religious practice since 1987. Ayahuasca is consumed only during religious ceremonies, which last approximately four hours, being regularly scheduled twice monthly and often attended by multigenerational families. Within the UDV, adolescents are offered the opportunity to voluntarily join their parents and participate in

ritual ceremonies where ayahuasca is consumed, and it is a common belief among members of the UDV that ayahuasca presents no risk for adolescents as long as they take it within a religious context. Nevertheless, to date there have been no controlled studies on the effects of periodic ritual ayahuasca use on adolescents.

In 1993, a comprehensive research investigation of ayahuasca use in long-term adult members of the UDV called the Hoasca Project was conducted in the Brazilian Amazon city of Manaus (Callaway et al. 1999, 1996 1994;

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TABLE 1
Demographic Characteristics of Adolescent Study (N = 80)

	Ayahuasca Group (N = 40)	Comparison Group (N = 40)
Age	16.52 years (SD = 1.34)	16.62 years (SD = 1.0)
Sex: Male	N = 22 (55.0 %)	N = 22 (55.0 %)
Female	N = 18 (45.0 %)	N = 18 (45.0 %)
Civil status: Single	N = 38 (95.0 %)	N = 37 (92.5 %)
Residence:		
Living with Parents	N = 37 (92.5 %)	N = 39 (97.5 %)
Ethnic group: White	N = 30 (75.0 %)	N = 33 (82.5 %)

McKenna et al. 1998; Grob et al. 1996). Phase I evaluations of pharmacokinetics, neuroendocrine assays, serotonin function, and psychiatric and medical health were then conducted. Contrasting the findings on 15 subjects from the UDV for at least 10 years with matched controls who had never consumed ayahuasca, this pilot investigation concluded that there was no evidence of injurious effect induced by ritual use of ayahuasca. Indeed, UDV subjects appeared to have experienced a remission of severe psychiatric disorders, including drug and alcohol abuse, following their entry into this religion.

Currently, the membership of the UDV in Brazil is estimated at close to 9,000, including approximately 1,200 adolescents. Considering the proportion of this age group within the population that uses these psychoactive substances on a regular basis, it is advisable to investigate the adolescents' psychiatric status and behavioral functioning.

The main objective of this study is to evaluate the mental condition of these adolescents through screening instruments for psychiatric disorders.

METHOD

Sample and Procedure

The study involved 40 adolescents, from both sexes, ages ranging from 15 to 19 years of age, who had drunk ayahuasca in a ritual context for at least 24 times in the last two years prior to the assessment. They were compared to a comparison group of 40 adolescents who had never drunk ayahuasca matched by sex, age, and educational level. Both groups live in the same communities and share the same environmental influences.

Ayahuasca-consuming adolescents were randomly selected among participants of three distinct UDV churches whereas the comparison group included randomly selected adolescents according to paring criteria. After a twenty-day washout period, ayahuasca adolescents were interviewed together with comparison group and asked to complete a series of scales aiming to screen for psychiatric conditions. Interviews were conducted by a trained psychiatrist in 2001 in two different Brazilian cities. Both adolescents and their

parents were asked to sign an informed consent before enrollment in the study.

Instruments

Measurement of psychiatric morbidity in the community and clinical settings in the last decades has been achieved basically by the use of standardized methods of measurement (Cooper 1987; Eastwood 1971). Many tests used in case identification are usually referred to as "screening tests" (Goldberg 1989) and have been developed to be used in a first stage assessment in populational studies to identify probable cases that will later have their "caseness" status confirmed or not in a second stage. Such a test is devised to be easy and quick to administer, usually does not involve rich diagnostic detail, but enables proper measurement of the condition. Tests used here are acceptable scientific tools both in the sense they proved they consistently measure a given phenomenon (reliability) and in the sense that they are actually measuring what they are designed to measure (validity; see Bartko & Carpenter 1976).

Subjects were assessed in terms of mental status by means of the following psychiatric screening instruments: SRQ (Self Report Questionnaire) to assess overall psychic condition (Iacoponi & Mari 1988; Mari & Williams 1986); CES-D (Center for Epidemiological Studies Depression Scale) for depression (Da Silveira & Joge 2002); Beck Anxiety Inventory and STAI (State-Trait Anxiety Inventory) as a screening for anxiety disorders (Gorenstein & Andrade 1996); DUSI (Drug Use Screening Inventory) to identify drug misuse (De Micheli & Formigoni 2002; Tarter et al. 1996, 1992); Conners' Adolescent Self-Rating subscale to detect Attention Deficit Disorder (Doering-Silveira & Da Silveira In press); and BSQ (Body Shape Questionnaire) to investigate self image related disorders. (Di Pietro & Da Silveira In press).

Data Analysis

Descriptive statistics were followed by comparisons between ayahuasca and control groups. Strength of associations was tested with chi-square for categorical variables, whereas t-test was used for comparing continuous variables.

