



ISPA

INSTITUTO UNIVERSITÁRIO
CIÊNCIAS PSICOLÓGICAS, SOCIAIS E DA VIDA

**ALTERED STATES OF
CONSCIOUSNESS,
ABSORPTION, AND SEXUAL
RESPONSIVENESS**

JACOPO ELLERO

Orientador de Dissertação:

PROFESSOR DOUTOR RUI COSTA

Professor de Seminário de Dissertação:

PROFESSORA DOUTORA ISABEL LEAL

Tese submetida como requisito parcial para a obtenção do grau de:

MESTRE EM PSICOLOGIA

Especialidade em Psicologia Clínica

2019

Dissertação de Mestrado realizada sob a orientação do
Prof. Doutor Rui Costa, apresentada no ISPA - Instituto
Universitário para obtenção de grau de Mestre na
especialidade de Psicologia Clínica.

Acknowledgements

I start the conclusion of my academic challenge by thanking the person that made this investigation possible, my coordinator prof. Dr. Rui Miguel Costa. It was an honor to learn from Dr. Costa, and this learning will surely be the basis for future reflections on the nature of human consciousness.

I thank my family, the dear ones who motivated my curiosity and love for life and its mysterious nature. I know you gave all that you could to accompany me, from my first steps to this recent one. At the conclusion of this academic year I will be back with you.

I thank Berta, for she knows what I am talking about. She also is far, in the moment of writing these lines, but she will never be distant from my consciousness.

I thank all the people and friends I shared special moments with: daily life, hard challenges, special moments of understanding, and of what some call mystic union. Those who lived with me know perfectly, no matter where and when.

My colleagues, collaborators and friends from Check!n Project (our job and mission in Harm Reduction) know the special touch I talk about, and are special fellows in learning about the science and the nature of consciousness. Most of our working hours are in a state of flow!

I cannot forget to thank all the participants in this study. By your authenticity, you showed me that borders cannot stop the search for one's truth, and that there is always someone to help out there.

Resumo

As relações sexuais alteram a consciência vígil usual. Estados alterados de consciência (EAC) referem-se a marcados desvios da consciência vígil usual. Investigação confirma que EAC podem ocorrer no sexo em termos de estados de absorção atencional nas sensações corporais concomitantes à perda de consciência do tempo. O presente estudo testou se, durante a relação sexual, maior responsividade sexual está relacionada com maior intensidade em dimensões de EAC que podem ocorrer com desencadeantes não sexuais, como meditação ou substâncias psicoactivas. Adicionalmente, o traço de personalidade “absorção” parece reflectir diferenças individuais na propensão para EAC. Assim, um segundo objetivo foi examinar se a absorção traço se relaciona com a intensidade de EAC durante o sexo. A amostra internacional contou com 448 participantes (303 mulheres, 145 homens). Os EAC foram medidos com quatro sub-escalas da *Altered States of Consciousness Rating Scale* (OAV): Experiência de Unidade, Experiência Espiritual, Estado de Beatitude e Momentos de Insight. A absorção-traço foi medida pela *Modified Tellegen Absorption Scale* (MODTAS). O funcionamento durante a última relação sexual foi medida através da soma de medidas de excitação, desejo, satisfação (responsividade sexual), assim como com questões sobre a ocorrência do orgasmo através de diversas actividades sexuais. Absorção-traço e responsividade sexual foram preditores independentes da intensidade de todas as dimensões dos EAC em mulheres e homens. Nas mulheres, o orgasmo vaginal feminino (durante o coito vaginal sem masturbação clitoriana concomitante) foi um preditor independente adicional dos EAC. O orgasmo masculino relacionou-se com os EAC, mas não independentemente da responsividade sexual.

Palavras chave: Estados Alterados de Consciência, Sexualidade, Absorção, Orgasmo, Espiritualidade

Abstract

Sexual intercourse alters normal waking consciousness. Altered states of consciousness (ASC) refer to marked deviations from usual waking consciousness, and include alterations in the sense of self, attention, thought processes, and time and sensory perception. Research confirms that ASC can occur in sex, as indicated by states of attentional absorption in bodily sensations concomitant with loss of time awareness. The present study aimed at testing if, during sexual relations, higher sexual responsiveness relates to higher intensity of dimensions of ASC that can occur in other contexts, such as meditation or psychoactive substances. The personality trait of absorption appears to reflect individual differences in the proclivity to experience ASC; thus, a second aim was to examine if trait absorption relates to intensity of ASC during sex. The international sample consisted of 448 participants (303 women, 145 men). ASC were measured with four sub-scales of *The Altered States of Consciousness Rating Scale* (OAV): Experience of Unity, Spiritual Experience, Blissful State and Insightfulness. Trait absorption was measured by the *Modified Tellegen Absorption Scale* (MODTAS). Sexual functioning during the last intercourse was assessed by the sum of measures of arousal, desire, and satisfaction (sexual responsiveness), as well as by questions on the occurrence of orgasm from different sexual activities. Trait absorption and sexual responsiveness predicted independently all dimensions of ASC among women and men. In women, vaginal orgasm (during vaginal intercourse *without* concomitant clitoral masturbation) was an additional independent predictor of ASC. Male orgasm related to ASC, but not independently from sexual responsiveness.

Key-words: Altered States of Consciousness, Sexuality, Absorption, Orgasm, Spirituality

Index

Introduction	1
Methods	6
Participants and procedure	6
Materials	7
Results	10
Discussion	19
Conclusion	25
References	27
Appendix	30

List of Annexes

Annex I – Literature Review

Annex II – Online Questionnaire (female version in English)

Annex III – Online Questionnaire (male version in English)

Annex IV – Online Questionnaire (female version in Portuguese)

Annex V – Online Questionnaire (male version in Portuguese)

List of Tables

Table 1 - Sociodemographics

Table 2 - Strength of ASC during the last sexual intercourse

Table 3 - Correlations between Sexual Involvement, Absorption and ASC in the female subgroup

Table 4 - Correlations between Sexual Involvement, Absorption and ASC in the male subgroup

Table 5 - Correlations between Sexual responsiveness and occurrence of Orgasm in the female subgroup

Table 6 - Correlations between Sexual responsiveness and occurrence of Orgasm in the male subgroup

Table 7 - Linear regression in the female subgroup

Table 8 - Linear regression in the female subgroup (N=303), including Orgasm by vaginal intercourse without clitoral masturbation

Table 9 - Linear regression in the male subgroup

Table 10 - Linear regression in the male subgroup (N=145), including orgasm regardless of triggering activity.

List of Tables

ASC - Altered States of Consciousness

MODTAS - Modified Tellegen Absorption Scale

OAV - The Altered States of Consciousness Rating Scale

PAS - Psychoactive Substance

TAS - Tellegen Absorption Scale

Introduction

Sexual intercourse requires one's attention to focus; the target of attention usually encompasses one's interoception, proprioception, the partner's body and feedbacks, and the sexual act itself. Especially in a highly involving intercourse, these attentional processes can elicit a state of "absorption". Absorbed states are mental states caused by the intense attention towards imagination and sensory experiences, which lead to changes in the perception of self, space, and time (Dal Cin, Hall, & Lane, 2016; Tellegen & Atkinson, 1974). In this sense, Absorption in a high degree can lead to altered states of consciousness (ASC), profound alterations of ordinary perception. Clinical and theoretical speculation in sexology and psychotherapy mentions ASC as a normal outcome of a sexual intercourse (Maslow, 1959; Mosher, 1980; Metz & McCarthy, 2007; Passie, Hartmann, Schneider, & Emrich, 2003; Swartz, 1994). The current investigation aims to expand the limited empirical evidence regarding the occurrence of ASC in sex, by studying the intercorrelations between sexual responses, trait absorption and ASC.

Absorption

Some people are more prone to experiencing absorbed states than others; therefore absorption exists along a personality trait continuum. The personality trait of absorption was first proposed by Tellegen and Atkinson (1974), and an instrument to measure it was developed: the *Tellegen Absorption Scale* (TAS). The authors noted that absorption is a "cognitive-motivational" personality trait reflecting the propensity for "absorbed states", which result from specific attentional processes. Trait Absorption correlates with hypnotic susceptibility. "Fascination" is one possible synonym for "absorbed state" (Tellegen & Atkinson, 1974). These states do typically occur in quiet, effortless conditions, devoid of significant activity, planning, and decision making (Tellegen, 1981). An absorbed state is

reached by the focus of “total attention during which the available representational apparatus seems to be entirely dedicated to experiencing and modeling the attentional object, be it a landscape, a human being, a sound, a remembered incident, or an aspect of one's self.” (Tellegen & Atkinson, 1974). Thus absorption features “the capacity for marked restructuring of one’s phenomenal field, especially the self and its boundaries” (Tellegen, 1992). Examples of items of the TAS are: “I can sometimes recollect certain past experiences in my life with such clarity and vividness that it is like living them again or almost so.” “I am sometimes able to forget about my present self and get absorbed in a fantasy that I am someone else.” “If I wish, I can imagine that my body is so heavy that I could not move it if I wanted to.” “I enjoy—or would enjoy—getting beyond the world of logic and reason to experience something new and different.”

The multimodal nature of absorption might depend on the Freudian mechanism of “condensation”, being “an important ingredient of creativity, particularly image-oriented, artistic creativity” (Tellegen & Atkinson, 1974). Absorption ascribes to various non-ordinary experiences reported in meditation, expanded awareness, peak experiences (Maslow, 1968), mysticism, esthetic experience, regression in the service of the ego, altered states of consciousness, and effects of drugs (Tellegen & Atkinson, 1974). Full immersion in activities that are challenging - but within the capabilities of the subject - elicits the experience of “flow”, which has been studied as a promoter of work and sports performance. Flow in work and sports is often considered an absorbed state due to the intrinsic pleasure of the activity, diminished awareness of time, and loss of the sense of self (Csikszentmihalyi & Csikszentmihalyi, 1988). In the experience of flow there is greater motor and mental activity, and purposefulness, than in “absorbed states” as they are normally thought about, that is, as largely passive and contemplative (Tellegen, 1981).

Absorbed states of attention during sex

States of absorption during sex are mentioned in literature, explicitly (Mosher, 1980; Swartz, 1994) or through synonyms such as “Peak Experience in beautiful sex” (Maslow, 1959), and “sexual trance” (Passie, Hartmann, Schneider, & Emrich, 2003). Swartz (1994) built his cognitive theory of human sexual response on the premise that all sexual activity is based on an attentional focus, necessary for sexual arousal. Such alteration in one’s attention facilitates the access to absorbed states, and vice versa: absorption in erotic stimuli, imagination, or both, can elicit arousal. During sexual activity the phenomenological field would encompass heightened focus in bodily sensations, reduction in attention towards the surroundings, and alteration in the perception of time (timelessness). According to Swartz, high levels of absorption in the sexual experience would enhance sexual arousal and pleasure for men, but they are not essential for male sexual response, whilst, for most women, high levels of absorption would be essential for high sexual arousal and orgasm.

Costa, Pestana, Costa, & Wittmann (2016) tested these hypotheses empirically with self-report questionnaires about the experience in the last sexual relation and found confirmation for them. For both men and women, greater body awareness correlated strongly with greater desire, arousal, and satisfaction, but for women more strongly so. Occurrence of orgasm correlated strongly with body awareness in women, but only moderately in men. In women, loss of time awareness correlated strongly with desire, arousal, orgasm, and satisfaction, but in men, only satisfaction correlated moderately with loss of time awareness. The correlations between sexual responses and loss of awareness of surrounding space were somewhat stronger for men, but modest.

While state absorption is important for sexual responsiveness, it is not clear to what extent trait absorption relates to sexual functioning, although some studies suggest that it might have a role, at least in some dimensions of sexual function. Sexual arousability was

associated with the ability to engage in mental imagery (Harris, Yulls, & Lacoste, 1980), which is a characteristic of trait of absorption. A personality trait that overlaps conceptually with absorption is “Creative Self-Forgetfulness”, which was modestly associated with higher sexual desire in women and men (Costa, Oliveira, Pestana, & Costa, 2016; Costa, Pestana, & Costa, 2018). Consistency of female orgasm during sexual intercourse was related to hypnotic susceptibility (Bridges, Critelli, & Loos, 1985), which is a consistent correlate of trait absorption. Hypnotic susceptibility was also correlated with liking to be carried away by the effects of alcohol, and lack of control over movements and thoughts near the end of coitus (Bridges, Critelli & Loos, 1985), which suggests people more prone to hypnotic states (and perhaps absorption more in general) are more likely to get absorbed in pleasures, sexual and others.

Mindfulness meditation training is practiced by focusing attention and awareness on the present moment, and it was shown to improve sexual desire, arousal and satisfaction in women (Brotto & Basson, 2014). Mindfulness meditation may increase trait absorption (Bowden, Gaudry, An, & Gruzelier, 2012), but it is presently unclear if putative increases in propensity for absorption caused by mindfulness are a mechanism that helps in improving sexual function.

Altered states of consciousness (ASC)

Although everyday life absorbed states are not necessarily ASC, the personality trait of absorption might facilitate the occurrence of ASC. In a factor analysis of the TAS (Jamieson, 2005), one factor emerged, which was named “Altered States of Consciousness,” and includes the following items: “Sometimes I feel as if my mind could envelop the whole world.” “I think I really know what some people mean when they talk about mystical experiences” “I

sometimes step outside myself and experience an entirely different state of being”.
“Sometimes I experience things as if they were doubly real.”

However, only a deep absorbed state can be considered an ASC. ASC involve “a marked deviation in the subjective experience or psychological functioning of a normal individual from her/his usual waking consciousness. This deviation represents not only changes in mood or motor activity (as under alcohol or tranquilizers) but also an unusual experience of oneself and one's surroundings. Time and space as fundamental categories of human experience are changed” (Dittrich, 1998).

In ASC, according to Wittmann (2015), “time consciousness and self-consciousness are prominently modulated: such ego and time modulations, in extreme cases induce a joint dissolution of the notions of self and time”. This happens especially through meditation, sensory deprivation, rhythm-induced trance (Vaitl, Birbaumer, Gruzelier, Jamieson, Kotchoubey, Kübler, et al., 2005), musical experience (Schäfer, Fachner, & Smukalla, 2013), and psychoactive substances (Dittrich, 1998).

Objectives

Recent studies confirmed previous theories (Swartz, 1994) proposing that higher sexual responsiveness is associated with ASC (states of high absorption), as indicated by absorption in bodily sensations concomitant with loss of time awareness (Costa, Pestana, et al. 2016).

Other aspects of ASC are commonly reported as feelings of unity with the environment, affective states of profound peace and love, spiritual experiences and insightfulness. The present study aims at testing if higher sexual responsiveness is related with these aspects of ASC. Because trait absorption is theoretically linked with ASC, a second aim is to examine if

trait absorption is related to the four dimensions of ASC during sex; namely: Experience of Unity, Spiritual Experience, Blissful State and Insightfulness.

Methods

Participants and procedure

Four hundred forty eight participants - 145 males and 303 females - (see Table 1) - replied to the online questionnaire developed on the platform GoogleForms (see Annex II, III, IV and V), after giving informed consent (see Annex II, III, IV and V). The introduction to the questionnaire explained the context of the research, the voluntary basis of participation, the anonymity and confidentiality of the answers, and linked to the e-mail address of the Tutoring Professor for eventual questions. Participants were reminded that they could leave answers blank in case they did not feel comfortable in answering honestly. The study had the approval of the Ethics Committee of ISPA - Instituto Universitário, and complied with the principles of the declaration of Helsinki.

Participants were contacted on the basis of virtual snowball sampling on the principle of convenience in social networks and via e-mail. To broaden the reach of the investigation the identical set of questions was presented in two languages: Portuguese and English. 81 participants replied to the Portuguese version (25 males, 56 females), and 367 to the English version (120 males, 247 females). There was a single link to the questionnaire, which would then display different instruments depending on the gender of the participant; in the Portuguese version, word endings and gender pronouns would adapt accordingly. Specific questions on sexual activity would not display in case the participant had not engaged in such during the previous month.

The responses were exported and introduced in a single dataset in SPSS 25 to proceed with statistical analysis. Participants were excluded from the univariate correlational analyses

if in treatment with psychiatric medication, and/or under the influence of psychoactive substances (PASs) during the last sexual intercourse (alcohol included; see Costa, Pestana, et al., 2016; Ogden, Wearden, Gallagher, & Montgomery, 2011), but they were included in the multiple regressions predicting ASC. Consumption of nicotine in isolation was not a criterion for exclusion, and was confirmed not to influence the experience of ASC in the linear regression analysis (see Table 7, 8, 9 and 10).

Ninety eight participants reported consumption of PASs during the last intercourse (29 males, 69 females), 1 male participant used antipsychotic medications, and 27 reported the use of antidepressants (5 males and 14 females in isolation; 1 male and 7 females in conjunction with use of PASs during the last intercourse). This account for the exclusion of 118 participants (35 males, 83 female) from the univariate correlational analyses.

The most reported PASs consumed in isolation were alcohol (9 males, 21 females) and cannabis (5 males, 21 females). Poly-consumption mixing the two substances was also reported (7 males, 7 females). Tobacco was also used alongside alcohol (3 males, 10 females). The use of other PASs was sporadic and included: GHB (1 male), MDMA (1 male, 1 female), alcohol and MDMA (1 female), cannabis and MDMA (1 male, 1 female), alcohol and GHB (1 female), alcohol, cannabis and caffeine (1 male, 1 female), alcohol, nicotine, and methamphetamine (1 male), nicotine, MDMA, cocaine and morphine (1 female), cannabis, cocaine, MDMA, opiates and hallucinogens (not better specified) (1 male).

Materials

Sociodemographic information. Questions regarded gender, age, profession, academic qualification, sexual partners, health problems, and use of medications and PASs.

Absorption. The MODTAS - *Modified Tellegen Absorption Scale* (Jamieson, 2005) was used to measure the trait of Absorption by self-report. It comprises 34 items in Likert-type scale from 1 to 5 (“Totally disagree” to “Totally agree”), of the kind: “Sometimes I feel as if

my mind could envelop the whole world.”, “If I wish I can imagine (or daydream) some things so vividly that they hold my attention as a good movie or story does.”, “It is sometimes possible for me to be completely immersed in nature or in art and to feel as if my whole state of consciousness has somehow been temporarily altered.” In TAS, the original version (Tellegen & Atkinson, 1974), test-retest reliability within 30 dias was $r = .91$ (n=481) (Rêbolo, 2018). The European Portuguese version of MODTAS (Rêbolo, 2018) demonstrated adequate internal consistency and construct validity; Cronbach’s alpha was .95 (N = 373) (See also Florindo, Rebôlo, & Costa; 2018) .

Sexual responsiveness and orgasm during last sexual intercourse. Sexual satisfaction, desire and arousal during last sexual intercourse were measured with a self-report Likert-type scale from 1 (“Not at all”) to 5 (“Extremely”), according to previous studies (Costa, Pestana, et al., 2016) originally in Portuguese. The format of the questions was: “How much sexual desire did you feel in your last sexual intercourse?”. The items were computed in a single factor (Sexual Responsiveness) for the linear regression analysis (see Table 7, 8 and 9).

More detailed information was collected about the orgasm in the last sexual intercourse, consistently with Costa, Pestana, et al., 2016. The dichotomous items (Yes, No) inquired about the occurrence of orgasm during the last sexual intercourse, and the type of orgasm. For the female participants, there existed the option for “Orgasm attained through penile-vaginal intercourse *without* concomitant clitoral masturbation”, “Orgasm through penile-vaginal intercourse with concomitant clitoral masturbation, and/or “Orgasm by partnered non-coital sex” (partnered practices of masturbation, oral sex and anal sex). For the male participants, the options were limited to “Orgasm attained through penile-vaginal intercourse”, and/or “Orgasm by partnered non-coital sex”. The format of the questions was “During your last sexual intercourse, did you have the feeling of orgasm through vaginal intercourse (penis into

vagina)?" A composite measure "Orgasm (any)" was computed for data analysis, indicating the occurrence of orgasm regardless of triggering activity (0 = no orgasm; 1 = reported orgasm).

Altered states of consciousness (ASC). ASC during the last sexual intercourse were measured with the self-report questionnaire OAV - *The Altered States of Consciousness Rating Scale* (Studerus, Gamma, & Vollenweider, 2010). The items are derived from the more extended version in German language APZ ("*Abnormal Mental States*") Questionnaire (Dittricht, 1998), translated into other languages, such as English and Brazilian Portuguese, and "applied internationally in approximately 70 experimental studies" - measuring the alteration of consciousness elicited by different kinds of sensory and pharmacological stimulation (Studerus, Gamma, & Vollenweider, 2010).

The introduction to the questionnaire in the current study stated: "Follows a set of statements that describe states that can be triggered by substance use, hypnosis, meditation, or some life events. Sometimes they also occur during sexual activity. Indicate to what extent you felt that these states were occurring during your last sexual intercourse or shortly after, compared to your usual day-to-day awareness (in non-sexual contexts). Indicate the change you felt with a number between 1 and 100." The 42 OAV items measure the alteration of consciousness during a specific event on a visual analogue scale (VAS) from 1 to 100. These items were chosen from the larger version of OAV along eleven, new, lower-order factors, on the basis of the psychometric evaluation conducted by the authors. The factors resulted "highly measurement invariant across drugs, settings, questionnaire versions, and sexes. The new factors were also demonstrated to have improved homogeneities, satisfactory reliabilities, discriminant and convergent validities, and to differentiate well among different drug groups." This version of OAV was validated by pooling data from 43 experimental studies, which

confirmed an adequate internal consistency: Cronbach's $\alpha > 0.8$ ($n=591$) (Studerus, Gamma, & Vollenweider, 2010).

For the statistical analysis of the current investigation, only four factors were included. The literature examined (Maslow, 1959; Metz & McCarthy, 2007; Mosher, 1980; Swartz, 1994) identifies phenomenological experiences in the alteration of consciousness during sex pertaining especially (though not exclusively) to the four dimensions of: Blissful State, Experience of Unity, Spiritual Experience, and Insightfulness. The significant strength of these 4 factors of the OAV was confirmed in this study (see Table 2). The items composing each of the four dimensions are listed as follows. Blissful State: "I enjoyed boundless pleasure." "I experienced a profound peace in myself." "I experienced an all-encompassing love."

Experience of Unity: "Everything seemed to unify into a oneness." "It seemed to me that my environment and I were one." "I experienced a touch of eternity." "Conflicts and contradictions seemed to dissolve." "I experienced past, present and future as an oneness".

Spiritual Experience: "I had the feeling of being connected to a superior power." "I experienced a kind of awe." "My experience had religious aspects."

Insightfulness: "I felt very profound." "I gained clarity in connections that puzzled me before." "I had very original thoughts."

Results

Table 1 presents the sociodemographic characteristics of the participants. The majority of the participants were European (89,8% of the female subgroup, 72,9% of the male subgroup).

Table 1 - Sociodemographics

	Women (N = 303)	Men (N = 145)
	N (%) or average (SD*)	N (%) or average (SD*)
Age	28.0 (9.41)	28.8 (8.82)
<i>Academic qualifications</i>		
Less than grade 12	13 (4.3%)	11 (7.6%)
12th grade	43 (14.2%)	23 (15.9%)
University student	43 (14.2%)	16 (11.0%)
Bachelor's Degree	116 (38.3%)	47 (32.4%)
Master's Degree	64 (21.1%)	31 (21.4%)
Higher Qualifications	12 (4.0%)	8 (5.5%)
<i>Profession</i>		
Student	143 (47.2%)	61 (42.1%)
Worker	134 (44.2%)	78 (53.8%)
Student worker	4 (1.3%)	1 (0.7%)
Unemployed	12 (4.0%)	4 (2.8%)
Retired	2 (0.7%)	1 (0.7%)
<i>Civil Status</i>		
Single	255 (84.2%)	121 (83.4%)
Married	15 (5.0%)	9 (6.2%)
Divorced	5 (1.7%)	5 (3.4%)
Widow or widower	1 (0.3%)	0
With a regular sex partner	180 (59.4%)	82 (56.6%)
<i>Nationality</i>		
Portuguese	63 (20.8%)	26 (17.9%)
Italian	130 (42.9%)	64 (44.1%)
European (Other)	79 (26.1%)	33 (10.9%)
Northern America	13 (4.3%)	4 (2.8%)
Latin America	4 (1.3%)	8 (5.5%)
Australia	16 (5.3%)	0

Asia	4 (1.3%)	3 (2.1%)
Africa	2 (0.7%)	0
<i>Exclusion criteria</i>		
Use of psychiatric medication**	21 (6.9%)	7 (4.8%)
Use of PASs during last sexual intercourse**	69 (22.8%)	29 (20%)

* SD = Standard Deviation; PASs = Psychoactive substances

** Exclusion criteria from the correlational analysis. Due to overlap, a total of 118 participants (35 male, 83 female) was excluded.

Table 2 shows the average strength of the alteration of consciousness along four dimensions of ASC, on the total population with application of the exclusion criteria (n=330). The scores in each dimension were standardized to a 100-point scale. The maximum and minimum score reported in the study is indicated in the columns Max and Min.

Table 2 - Strength of ASC during the last sexual intercourse (n=330)

	Mean	SD*	Media	Min**	Max**
	n				
Experience of Unity	37,13	25,266	36	1	100
S p i r i t u a l					
Experience	22,86	22,253	17	1	97
Blissful State	49,47	31,205	53	1	100
Insightfulness	29,81	26,791	25	1	100

*Standard Deviation

**Reported in this study

Table 3 and 4 present the results regarding the female (Table 3) and male (Table 4) sub-groups during the last intercourse. Correlations are shown between the dimensions of ASC

during sex (Experience of Unity, Spiritual Experience, Blissful State, and Insightfulness) and measures of sexual responsiveness (Satisfaction, Desire, and Arousal), occurrence of Orgasm (differentiated on the basis of triggering activity), and trait absorption (MODTAS). The correlation of ASC with use of PASs during the last intercourse was also analyzed.

In the female subgroup, the variables of trait absorption (MODTAS) and sexual responsiveness (Satisfaction, Desire, and Arousal) correlated moderately with ASC, but the use of PASs did not correlate significantly. The correlation between sexual response and Blissful State was strong. In the male sub-group, correlations were similar, but with some differences. Arousal and satisfaction did not correlate significantly with Spiritual Experience; nor did Absorption correlate with Blissful State. The use of PASs correlated with Spiritual experiences.

In the female sub-group, only Orgasm by vaginal intercourse *without* clitoral masturbation demonstrated to correlate with all the dimensions of ASC, showing a stronger correlation with Blissful State. Orgasm by partnered non-coital sex correlated with Blissful State, and orgasm during the last intercourse correlated with Experience of Unity and Blissful State.

In the male sub-group, Orgasm by vaginal intercourse did not correlate with any ASC. Orgasm by partnered non-coital sex correlated with the ASC, but did not correlate with Insightfulness. The occurrence of orgasm correlated with Experience of Unity, Insightfulness, and, less moderately, with Blissful State. However, it did not correlate with Spiritual Experience.

Table 3 - Correlations between Sexual Involvement, Absorption and ASC in the female subgroup

F (n=220)	Experience of Unity	S p i r i t u a l Experience	Blissful State	Insightfulness
MODTAS	.44**	.34**	.30**	.40**
Satisfaction	.33**	.29**	.55**	.33**
Desire	.40**	.34**	.53**	.35**
Arousal	.36**	.27**	.47**	.27**
Orgasm by vaginal intercourse <i>without</i> clitoral masturbation	.29**	.22**	.37**	.25**
Orgasm by vaginal intercourse <i>with</i> clitoral masturbation	.01	.01	.00	.00
Orgasm by partnered non-coital sex	.08	.07	.17*	.09
Orgasm (any)	.17*	.11	.27**	.11
Use of PASs during last coitus ^o	-.01	.05	-.05	-.02

^oWithout exclusion (n=303).

* p < .05

** p < .01

Table 4 - Correlations between Sexual Involvement, Absorption and ASC in the male subgroup

M (n=110)	Experience of Unity	S p i r i t u a l Experience	Blissful State	Insightfulness
MODTAS	.35**	.43**	.09	.30*
Satisfaction	.33**	.19	.43**	.35**
Desire	.28**	.32**	.51**	.42**
Arousal	.23*	.20	.45**	.34**
Orgasm by vaginal intercourse	-.01	-.03	.09	.10
Orgasm by partnered non-coital sex	.26*	.24*	.22*	.17
Orgasm (any)	.25*	.16	.36**	.23*
Use of P A S s during last coitus ^o	.09	.21*	.06	.13

^oWithout exclusion (n=145).

* p < .05

** p < .01

Table 5 and 6 present the correlations between sexual responsiveness (Satisfaction, Desire, and Arousal), occurrence of Orgasm (differentiated on the basis of triggering activity) during the last intercourse, regarding the female (Table 5) and male (Table 6) sub-groups.

In the female sub-group, Orgasm by vaginal intercourse *without* clitoral masturbation correlated moderately with sexual responsiveness. Orgasm by vaginal intercourse *with* clitoral masturbation showed a negative correlation with desire and arousal, and did not correlate to satisfaction. Orgasm by partnered non-coital sex correlated with Satisfaction, but did not correlated with other variables. The occurrence of orgasm correlated strongly with Satisfaction, but less so to the other variables. In the male subgroup the only correlation was observed between the occurrence of orgasm and sexual responsiveness.

Table 5 - Correlations between Sexual responsiveness and occurrence of Orgasm in the female subgroup

F (n=220)	Desire	Arousal	Satisfaction
Orgasm by vaginal intercourse <i>without</i> clitoral masturbation	.27**	.22**	.34**
Orgasm by vaginal intercourse <i>with</i> clitoral masturbation	-.17*	-.19*	-.06
Orgasm by partnered non-coital sex	.13	.10	.22**
Orgasm (any)	.28**	.22**	.44**

* p < .05

** p < .01

Table 6 - Correlations between Sexual responsiveness and occurrence of Orgasm in the male subgroup

M (n=110)	Desire	Arousal	Satisfaction
Orgasm by vaginal intercourse	.19	.06	.11
Orgasm by partnered non-coital sex	.04	.04	.10
Orgasm (any)	.28**	.31**	.29**

* p < .05

** p < .01

Table 7 and 9 show the multiple linear regression of the relationship between the dependent variable of ASC (Experience of Unity, Spiritual Experience, Blissful State, and Insightfulness) and the independent variables of Age, trait of absorption (MODTAS), Sexual Responsiveness in the last coitus (computing the variables of Satisfaction, Desire and Arousal), and use of Tobacco, PASSs, and Antidepressants, in the total of the participants

(n=448) divided into two subgroups on the basis of gender: female (n=303) and male (n=145). Table 8 shows the linear regression for the female population, with the addition of the independent variable “Orgasm by vaginal intercourse *without* clitoral masturbation.”. Table 10 shows the linear regression for the male population, with the addition of the independent variable of orgasm regardless of triggering activity: “Orgasm (any)”.

Only the trait of absorption and sexual responsiveness in the last sexual intercourse explained the alteration in consciousness. This effect is significant for all the dimensions only in the female subgroup (Table 7 and 8). The orgasm by vaginal intercourse *without* clitoral masturbation weakly predicted ASC, independently from the trait of absorption and other factors of sexual responsiveness (Arousal, Desire and Satisfaction) in the last sexual intercourse.

In the male subgroup (Table 9), sexual responsiveness in the last sexual intercourse explained all the ASC. Trait absorption only explained Spiritual experience and Experience of Unity. The strongest effect ($\beta = .56$, $p < .001$) was the one of sexual responsiveness on Blissful Experience, in both the sub-groups. Male orgasm showed no explicatory power for ASC, regardless of triggering activity (Table 10).

Table 7 - Linear regression in the female subgroup (N=303)

	Experience of Unity	S p i r i t u a l Experience	Blissful State	Insightfulness
Age	.19 (.075)	.06 (.281)	.12 (.020)	.04 (.454)
MODTAS	.42 (>.001)	.40 (>.001)	.28 (>.001)	.43 (>.001)
Sexual Responsiveness	.39 (>.001)	.36 (>.001)	.56 (>.001)	.31 (>.001)
Use of tobacco	.04 (.497)	.07 (.208)	.02 (.677)	.04 (.470)
Use of PASs	-.04 (.408)	.02 (.776)	-.07 (.191)	-.07 (.232)
Use of antidepressants	.01 (.809)	-.03 (.549)	-.01 (.887)	.00 (.981)

Table 8 - Linear regression in the female subgroup (N=303), including Orgasm by vaginal intercourse *without* clitoral masturbation

	Experience of Unity	S p i r i t u a l Experience	Blissful State	Insightfulness
Age	.07 (.150)	.04 (.417)	.10 (.041)	.03 (.644)
MODTAS	.41 (>.001)	.39 (>.001)	.26 (>.001)	.42 (>.001)
Sexual Responsiveness	.35 (>.001)	.32 (>.001)	.51 (>.001)	.27 (>.001)
Orgasm by vaginal intercourse <i>without</i> clitoral masturbation	.13 (>.05)	.11 (.051)	.15 (>.01)	.12 (>.05)
Use of tobacco	-.03 (.538)	.01 (.831)	.02 (.655)	-.01 (.832)
Use of PASs	-.04 (.423)	.03 (.613)	-.06 (.230)	-.06 (.264)
Use of antidepressants	.01 (.872)	-.03 (.527)	-.01 (.858)	-.01 (.931)

Table 9 - Linear regression in the male subgroup (N=145)

	Experience of Unity	S p i r i t u a l Experience	Blissful State	Insightfulness
Age	0.1 (.867)	-.5 (.531)	.03 (.661)	.04 (.619)
MODTAS	.29 (>.001)	.46 (>.001)	.07 (.346)	.26 (.003)
Sexual Responsiveness	.29 (>.001)	.20 (>.05)	.56 (>.001)	.33 (>.001)
Use of tobacco	.05 (.593)	.04 (.584)	.12 (.132)	.05 (.534)
Use of PASs	.06 (.502)	.12 (.144)	.12 (.146)	.12 (.178)
Use of antidepressants	-.14 (.104)	-.08 (.343)	-.10 (.210)	-.09 (.288)

Table 10 - Linear regression in the male subgroup (N=145), including orgasm regardless of triggering activity.

	Experience of Unity	S p i r i t u a l Experience	Blissful State	Insightfulness
Age	.01 (.892)	-.05 (.500)	.04 (.645)	.04 (.631)
MODTAS	.30 (>.01)	.47 (>.001)	.07 (.360)	.26 (>.01)
Sexual responsiveness	.23 (>.05)	.16 (.073)	.55 (>.001)	.34 (>.01)
Orgasm (any)	.11 (.229)	.08 (.358)	.01 (.929)	.00 (.976)
Use of tobacco	.02 (.779)	-.07 (.391)	.06 (.417)	.03 (.713)
Use of PASs	.07 (.416)	.12 (.149)	.15 (.068)	.13 (.132)
Use of antidepressants	-.13 (.124)	-.05 (.502)	-.10 (.189)	-.09 (.271)

Discussion

The intent of this study is to observe the occurrence of ASC during sex, and the way they relate, on the base of gender differences, with the involvement in the intercourse and the trait of absorption.

The results confirm that, during sex, it is possible to experience some alteration of consciousness in comparison to daily life awareness - without mind-altering substances - as measured in the OAV (Studerus, Gamma, & Vollenweider, 2010) (see Table 2). However, only four dimensions were shown to determine a consistent and deep alteration of consciousness: Experience of Unity, Blissful State, Insightfulness and Spiritual Experience. The mean score in these dimensions was higher than 20 of the scalar maximum of 100 (see Table 2). Blissful State showed the highest average score of 49 points.

These observations confirm various aforementioned theories on sexuality. Overall, the multiple linear regression (see Table 7, 8 and 9) confirms that both the trait of absorption (Tellegen & Atkinson, 1974) and the state of absorption in the intercourse (Costa, Pestana, et al., 2016) can explain independently a large size of the alteration of consciousness. In other words, a high sexual responsiveness during the intercourse is sufficient to experience ASC, to the extent of a marked deviation from usual consciousness. Individuals with high trait absorption can also experience ASC during sex, independently from sexual responsiveness. Some gender differences were observed in the study, for these effects are consistent and stronger in the female subgroup for all the four dimensions of ASC studied, but less so in the male subgroup.

In the female subgroup, vaginal orgasm *without* clitoral masturbation correlated with all the dimensions of ASC, but the other kinds of orgasm did not: there seems to be a specific interconnection between female vaginal orgasm (*without* clitoral masturbation) and deep alterations of consciousness. In general, the male orgasm behaved differently. Orgasm by vaginal intercourse did not show any correlation to ASC, while orgasm by partnered non-coital sex correlated with ASC, although it did not correlate with Insightfulness. The occurrence of male orgasm did not predict ASC in linear regression (Table 10). In the female subgroup, the only correlation outside vaginal orgasm (*without* clitoral masturbation) was the

correlation between orgasm by partnered non-coital sex and Blissful State. Costa, Pestana et al. (2016) observed alteration of consciousness (highly absorbed states) during sex, with a similar pattern: “greater attentional absorption in bodily sensations and a greater loss of the perception of time were strongly related to women’s orgasms, but only moderately so to men’s orgasms. That is, absorbed states seem to be more strongly related to the female orgasm, particularly to orgasm during vaginal intercourse.” “Absorbed states do not appear to be important for female orgasm from partnered noncoital sex.” (Costa, Pestana et al., 2016).

The linear regression about the female subgroup (Table 8) shows that orgasm by vaginal intercourse *without* clitoral masturbation weakly predicted ASC (but not Spiritual Experience) independently from the trait of absorption and other factors of sexual responsiveness (Arousal, Desire and Satisfaction) in the last sexual intercourse. However, the correlation between female orgasm (*without* clitoral masturbation) and ASC (Table 2) alludes to the possibility that, conversely, female orgasm (*without* clitoral masturbation), but not other kinds of orgasm, might be also more easily triggered during more intense ASC. Perhaps this intercorrelation with ASC makes female vaginal orgasm (*without* clitoral masturbation) somewhat infrequent at the population level, as it has been demonstrated by epidemiological studies.

Positive correlations between sexual response and the occurrence of orgasm (when ignoring the triggering activity) (Table 4) are consistent with all the factors of sexual response, and they are similar in the two gender subgroups. However, Satisfaction correlates more strongly with the occurrence of female orgasm (when ignoring the triggering activity). Vaginal orgasm *without* clitoral masturbation shows identical correlations with desire and arousal, and similar moderate to strong correlations with satisfaction. In the female subgroup, also partnered non-coital orgasm correlates with satisfaction, though less strongly. Partnered non-coital orgasm does not correlate with desire and arousal. On the contrary, orgasm by

vaginal intercourse *with* clitoral masturbation does not correlate to satisfaction, but it does show a negative correlation with desire and arousal. In the male subgroup no correlations are observed, other than with orgasm regardless of the triggering activity. In the female subgroup, orgasm by vaginal intercourse *without* clitoral masturbation seems to be especially related to higher desire and arousal, plus it seems to be especially linked to sexual satisfaction. However, it does not seem to rely exclusively on ordinary sexual responsiveness.

The dimension of Blissful state presented the highest scores in the study (an average score of 49). In both the male and female subgroups, Blissful state was explained in the linear regression by Sexual Responsiveness ($\beta = .56$, $p < .001$). In both subgroups, Blissful state consistently showed the strongest correlation (moderate to strong) between a dimension of ASC and any factor of sexual responsiveness. Trait absorption had a moderate effect on Blissful state only for the female subgroup ($\beta = .28$, $p < .001$), but no significant effect for the male subgroup. A blissful state related to sex could be also explained by the way sex facilitates peak experiences (Maslow, 1968, p.169-70). Accordingly, a possible physical reaction to a peak experience, such as “beautiful sex”, “is relaxation, peacefulness, quietness, the feeling of stillness.”, reflecting the item: “I experienced a profound peace in myself.” (Maslow, 1959)

The Experience of Unity can be interpreted as deep connection with the partner (Swartz, 1994) or as universal union (Mosher, 1980). Particularly after the orgasm, the experience of unity is described through “sensations of merging”, that is “loosening and dissolution of personal boundaries” (Swartz, 1994), disturbed time sense (e.g., “timelessness”), and body image change (dissolution of boundaries) (Mosher, 1980). Phenomena of alteration of time during the intercourse were previously confirmed empirically: female participants reported lessened sense of time in correlation with increased sexual responsiveness, with a weaker effect for males. Orgasm was also related to lower time awareness in women, but not in men.

Furthermore, in women, desire correlated moderately with lesser space awareness. (Costa, Pestana, et al., 2016). Vaitl et al. (2005) report empirical psychobiological evidence for ASC during sex with “partial loss of consciousness during orgasm”, with a reduction of the awareness span (as in the aforementioned lessened sense of time and space), Self-awareness (similarly to the aforementioned “loosening and dissolution of personal boundaries”), and sensory dynamics. These phenomena may facilitate the Experience of Unity, characterized in the OAV by feelings of oneness, union with the environment, dissolution of contradictions, loss of time perception, and a “touch of eternity”.

Spiritual Experience showed the least strength among the four dimensions studied (23 points on average). The attitude of “ascribing sacred qualities to sex (e.g., holiness, blessed) has been positively associated with positive affective reactions to sex, frequency of sex, and number of sexual partners among university students (Murray-Swank, Pargament, & Mahoney, 2005). This attitude could be reflected by items such as “I experienced a kind of awe” and “My experience had religious aspects.”

A spiritual experience during sex is thought to arise spontaneously, but to be increased by the disposition and style of the individual and the couple (Mosher, 1980). This dispositional approach could explain the lack of correlation of spiritual experience with male satisfaction and arousal (it correlated significantly only with desire): a “spiritual approach” to the sexual encounter would induce a spiritual interpretation of the event, regardless other coital factors such as deep state absorption in the coitus. Consistently, in the linear regression, in the male subgroup trait absorption exerted a strong effect ($\beta = .46$, $p < .001$) on Spiritual experience. For the male population, altered consciousness with spiritual experiences during sex seems to depend on personal disposition (as measured by trait absorption) independently from sexual activity. Sexual activity alone might be less likely to elicit ASC with spiritual overtones, as it showed to be a less strong predictor ($\beta = .20$, $p < .05$). In the male sub-group, use of PASs during the last intercourse correlated with Spiritual Experience. A possible

contribution to this phenomenon could be found in the disposition of users of substances such as cannabis, who sometimes report a spiritual purpose for consumption (Solymosi & Kofalvi, 2017; Yeterian, Bursik, & Kelly, 2018).

The association between spirituality and sexual practices (Burris, Smith, & Carlson, 2009; Murray-Swank, Pargament, & Mahoney, 2005) highlights the relevance of future investigations pertaining spiritual disposition and alteration along the Spiritual Experience sub-scale.

Novel approaches to sex therapy were developed expecting spiritual experiences as possible outcomes (Metz & McCarthy; 2007). Mindfulness is applied to sex therapy, especially for female non-organic sexual dysfunctions (Mize, 2015), through its non-judgemental attentional focus on the current sensations. Mindfulness is a system of meditation based on attentional focus (Brotto & Basson, 2004; for a review: Brotto, Krychman, & Jacobson, 2008), so that it could elicit states of absorption - meditation is one possible trigger according to Tellegen & Atkinson (1974). Mindfulness practice was observed to be capable of increasing the scores in the trait of absorption (Bowden, Gaudry, An, & Gruzelier, 2012), but it is presently unclear if this increase in trait absorption depends on the same mechanisms that help in improving sexual function.

The ASC observed in the study describe mostly the experiences of European young adults, being one limitation in the recruitment of participants the virtual snowballing on the base of convenience; geo-cultural differences could be expected to reflect upon ASC in sex in future replications. Age, regular sexual partner, and duration of the relationship did not show any explicatory power: only involvement in the last coitus did. However, the quality of a well-established sexual partnership should reflect upon the involvement in the intercourse. Deeper alterations could be observed in a population with higher age and extended positive sexual partnership.

Another methodological limitation lays in the focus about the *last* sexual intercourse. Following research should aim at establishing the frequency and consistency of ASC along the year, the relationship with one partner, and the lifetime. ASC correlated positively with higher sexual satisfaction: identifying facilitating factors for the experience of ASC during sex could benefit sex therapy.

Finally, a conceptual limitation is the difficulty in distinguishing the effects of absorption *during* sex from the effects of orgasm *just at the end* of sex. That is, this study observed the occurrence of ASC during or just after sex. However, it was not established if the alterations occurred with such depth during the act, or if they only deepened after the orgasm. Orgasm, especially in the male population, is considered the terminal act of sex, corresponding to ejaculation. The female sexual experience tends to display more nuances. However, to separate the perceptions associated with each different moment of the sexual intercourse may not be within the reach of self-report retrospective studies, if not applied directly after the intercourse.

Conclusion

The present study is the first to observe the perceptual alterations during sex explicitly in terms of naturally occurring ASC. Such alterations are confirmed to be explained independently by trait absorption and involvement in the sexual intercourse, as previously proposed in literature. However, gender differences were observed: only women show a consistent effect of trait absorption and sexual responsiveness on all the dimensions of ASC inherent to sex. The altered consciousness most commonly induced by sex appeared to be determined mainly by an intense bliss and the experience of unity, beyond the boundaries of the Self. This boundlessness can be related to spiritual feelings and mystical insights.

These results corroborate the claims about sex typical of anecdotal reports, spiritual traditions, and contemporary sexology. However, the impact of subjective factors such as personal beliefs about sex, quality of the relationship, and previous experience of awareness practices could provide a clearer outlook on consciousness and sex.

References

- Bridges, C. F., Critelli, J. W., & Loos, V. E. (1985). Hypnotic susceptibility, inhibitory control, and orgasmic consistency. *Archives of Sexual Behavior*, 14, 373–376.
- Bowden, D., Gaudry, C., An, S. C., & Gruzelier, J. (2012). A comparative randomised controlled trial of the effects of brain wave vibration training, iyengar yoga, and mindfulness on mood, well-being, and salivary cortisol. *Evidence-based complementary and alternative medicine*, 2012. doi: 10.1155/2012/234713
- Brotto, L. A., & Basson, R. (2014). Group mindfulness-based therapy significantly improves sexual desire in women. *Behavioral Research and Therapy*, 57, 43–54.
- Brotto, L. A., Krychman, M., & Jacobson, P. (2008). Eastern Approaches for Enhancing Women's Sexuality: Mindfulness, Acupuncture, and Yoga (CME). *The Journal of Sexual Medicine*, 5(12), 2741–2748. <https://doi.org/10.1111/j.1743-6109.2008.01071.x>
- Burris, J. L., Smith, G. T., & Carlson, C. R. (2009). Relations among religiousness, spirituality, and sexual practices. *Journal of Sex Research*, 46, 282–289. <http://dx.doi.org/10.1080/00224490802684582>.
- Costa, R. M., Oliveira, T. F., Pestana, J., & Costa, D. (2016). Self-transcendence is related to higher female sexual desire. *Personality and Individual Differences*, 96, 191–197.
- Costa, R. M., Pestana, J., Costa, D., & Wittmann, M. (2016). Altered states of consciousness are related to higher sexual responsiveness. *Consciousness and Cognition*, 42, 135–141. doi.org/10.1016/j.concog.2016.03.013
- Csikszentmihalyi, M., & Csikszentmihalyi, I. S. (1988). *Optimal experience: psychological studies of flow in consciousness*. Cambridge: Cambridge University Press.
- Dal Cin, S., Hall, M.P., & Lane, D.S. (2016) Absorption. In: Zeigler-Hill V., Shackelford T. (eds) *Encyclopedia of Personality and Individual Differences*. Springer, Cham
- Dittrich, A. (1998). The standardized psychometric assessment of altered states of consciousness (ASCs) in humans. *Pharmacopsychiatry*, 31: 80–84. 10.1055/s- 2007-979351.
- Florindo, V., Rebôlo, C., & Costa, R. M. (2018). Validação da Modified Tellegen Absorption Scale em português: uma medida de absorção traço [Validation of the Modified Tellegen Absorption Scale in Portuguese: a measure of trait absorption]. *Psicologia, Saúde & Doenças*, 19, 490-502.
- Harris, R., Yulis, S., & Lacoste, D. (1980). Relationships among sexual arousability, imagery ability, and introversion-extraversion. *Journal of Sex Research*, 16, 72–86.
- Jamieson G. A. (2005). The modified tellegen absorption scale: a clearer window on the structure and meaning of absorption. *Australian Journal of Clinical and Experimental Hypnosis*, 33(2), 119-139.

- Maslow, A. H. (1968). *Toward a psychology of being*. (2nd ed.) Princeton: Van Nostrand.
- Maslow, A. H. (1959). Cognition of Being in the Peak Experiences. *The Journal of Genetic Psychology*, 94(1), 43–66. <https://doi.org/10.1080/00221325.1959.10532434>
- Metz, M. E., & McCarthy, B. W. (2007). The «Good-Enough Sex» model for couple sexual satisfaction. *Sexual and Relationship Therapy*, 22(3), 351–362. <https://doi.org/10.1080/14681990601013492>
- Mize, S. J. S. (2015). A Review of Mindfulness-Based Sex Therapy Interventions for Sexual Desire and Arousal Difficulties: From Research to Practice. *Current Sexual Health Reports*, 7(2), 89–97. <https://doi.org/10.1007/s11930-015-0048-8>
- Mosher, D. L. (1980). Three dimensions of depth of involvement in human sexual response. *Journal of Sex Research*, 16, 1–42.
- Murray-Swank, N. A., Pargament, K. I., & Mahoney, A. (2005). At the crossroads of sexuality and spirituality: The sanctification of sex by college students. *The International Journal for the Psychology of Religion*, 15, 199–219.
- Ogden, R. S., Wearden, J. H., Gallagher, D. T., & Montgomery, C. (2011). The effect of alcohol administration on human timing: A comparison of prospective timing, retrospective timing and passage of time judgements. *Acta Psychologica*, 138, 254–262.
- Passie, T., Hartmann, U., Schneider, U., & Emrich, H. M. (2003). On the function of groaning and hyperventilation during sexual intercourse: intensification of sexual experience by altering brain metabolism through hypocapnia. *Medical Hypotheses*, 60(5), 660–663. [https://doi.org/10.1016/s0306-9877\(03\)00010-0](https://doi.org/10.1016/s0306-9877(03)00010-0)
- Qualls, P. J. & Sheehan, P. W. (1981). Imagery encouragement, absorption capacity and relaxation during electromyograph biofeedback. *Journal of Personality and Social Psychology*, 41, 370-379.
- Rebôlo, C. (2018). Absorção, dissociação e funcionamento sexual. Tese de Mestrado. <http://repositorio.ispa.pt/handle/10400.12/6637>
- Schäfer, T., Fachner, J., & Smukalla, M. (2013). Changes in the representation of space and time while listening to music. *Frontiers in Psychology*, 4(508). <https://doi.org/10.3389/fpsyg.2013.00508>
- Solymosi, K., & Kofalvi, A. (2017). Cannabis: A Treasure Trove or Pandora's Box? *Mini-Reviews in Medicinal Chemistry*, 17(13). <https://doi.org/10.2174/1389557516666161004162133>
- Studerus E., Gamma A., Vollenweider, F. X. (2010). Psychometric Evaluation of the Altered States of Consciousness Rating Scale (OAV). *PLoS ONE* 5(8): e12412. doi:10.1371/journal.pone.0012412

- Swartz, L. H. (1994). Absorbed states play different roles in female and male sexual response: Hypotheses for testing. *Journal of Sex & Marital Therapy*, 20, 244–253.
- Tellegen, A. (1981). Practicing the two disciplines for relaxation and enlightenment: Comment on “Role of the feedback signal in electromyograph biofeedback: The relevance of attention” by Qualls and Sheehan. *Journal of Experimental Psychology: General*, 110(2), 217–226.
- Tellegen, A. (1992, August). Note on structure and meaning of the MPQ Absorption scale. Unpublished manuscript, University of Minnesota.
- in Jamieson G. A. (2005). The modified tellegen absorption scale: a clearer window on the structure and meaning of absorption. *Australian Journal of Clinical and Experimental Hypnosis*, 33(2), 119-139.
- Tellegen, A., & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, 83, 268-277.
- Vaitl, D., Birbaumer, N., Gruzelier, J., Jamieson, G. A., Kotchoubey, B., Kübler, A., et al (2005). Psychobiology of altered states of consciousness. *Psychological Bulletin*, 131, 98–127.
- Wittmann, M. (2015). Modulations of the experience of self and time. *Consciousness and Cognition*, 38, 172–181. <https://doi.org/10.1016/j.concog.2015.06.008>
- Yeterian, J. D., Bursik, K., & Kelly, J. F. (2018). “God put weed here for us to smoke”: A mixed-methods study of religion and spirituality among adolescents with cannabis use disorders. *Substance Abuse*, 39(4), 484–492. <https://doi.org/10.1080/08897077.2018.1449168>

APPENDIX

Annex I - Literature Review

Altered States of Consciousness (ASC)

Altered States of Consciousness (ASC) are described as “a marked deviation in the subjective experience or psychological functioning of a normal individual from her/his usual waking consciousness. This deviation represents not only changes in mood or motor activity (as under alcohol or tranquilizers) but also an unusual experience of oneself and one's surroundings. Time and space as fundamental categories of human experience are changed” (Dittrich, 1998).

ASC can be spontaneous or (self-)induced, by physical and psychological stimulation, as well as by suggestion (Vaitl, Birbaumer, Gruzelier, Jamieson, Kotchoubey, Kübler, et al.; 2005). This review will highlight the characteristics and the types of alteration of consciousness, in order to contextualize the topic of naturally occurring ASC in sex. The attentional phenomenon of attentional absorption will be pivotal in this exploration. Clinical and theoretical speculation in sexology and psychotherapy mentioning ASC as a normal outcome of a sexual intercourse (Maslow, 1959; Mosher, 1980; Metz & McCarthy, 2007; Passie, Hartmann, Schneider, & Emrich, 2003; Swartz, 1994) are introduced. Existing empirical evidence will be compared to the assumptions in the aforementioned models.

According to the psychobiological review of Vaitl et al. (2015), with the exclusion of neurological disfunction and pharmacological induction, the most common ASC appear spontaneously in moments of uncommon sleepiness, daydreaming, hypnagogic states and the phases of sleep and dreaming. However, also Vaitl et al. define ASC only as marked deviations from normal consciousness: in this case they do not refer to the common sleep cycle, but only to rare occasions linked to extreme physical or environmental conditions. Another uncommon phenomenon is a Near-Death Experience.

Lucid dreaming is the less common experience of awareness during a dream; some can participate actively in the dream, and some are able to change its setting at will. Lucid dreaming can be trained, and various techniques and devices were invented for the purpose (for a review: Stumbrys, Erlacher, Schädlich, & Schredl; 2012).

ASC are elicited by physical stimulation, such as diet and starvation, breathing techniques, sexual activity and orgasm, and extreme environmental stressors - like temperature and physical pressure (Vaitl et al.; 2015).

Psychological induction works on the attentional focus, as in relaxation techniques, meditation, and biofeedback. Sensory induction is based on sensory restriction, sensory homogenization, sensory overload; and repetitive rhythm, such as drums for obsessive dance, as in ancestral rituals (Vaitl et al.; 2015). Melodic and symphonic music can stimulate perceptual alterations (Schäfer, Fachner, & Smukalla, 2013).

There exists an unresolved controversy regarding clinical hypnosis, a concept that refers both to the hypnotic suggestion technique and the -non-ordinary- hypnotic experience it can elicit. The hypnotic experience can probably be described as a sequence of different states of consciousness with varying depth of involvement in the experience, which may not necessarily involve ASC (Mazzoni, Venneri, McGeown, & Kirsch; 2013).

Sensory restriction

Sensory stimulation tends to induce modality-dependent perceptual alterations, whilst the overall phenomenological experience of ASC that is elicited by sensory stimulation can include wider alterations of cognition, mood and of the experience of the Self. For example, in a Ganzfeld (from the German “complete field”) the subject is exposed to an unstructured and uniform visual field (such as a totally white wall): the first signs of alteration are visual hallucinations, but the experience can then involve deeper subjective responses. In a

multimodal Ganzfeld also sound is controlled and kept constant: the onset of the ASC can include auditory hallucinations in addition to visual hallucinations (Wackermann, Pütz, Allefeld; 2008).

(Total) sensory restriction can elicit deeper sensorial alterations, including the experience of low gravity and the illusion of true floatation (Vaitl et al., 2015). This is the aim of the recent “OVO Whole-Body Perceptual Deprivation” (Dotan Ben-Soussan, Mauro, Lasaponara, Glicksohn, Marson, & Berkovich-Ohana; 2019). The first isolation -or “sensory deprivation”- tank was invented in 1954 by Lilly (1956), whose principles serve nowadays for the “floating therapy” for stress reduction (Vaitl et al., 2015), generalized anxiety (Jonsson & Kjellgren, 2016), and, possibly, life quality improvement (Kjellgren & Westman, 2014). Sensory restriction is induced through floatation in “capsules” or pools (Miller-Klein, & Golden, 2018). A magnesium salt solution is kept just below body temperature, in a dark tank insulated from outer stimuli. The immersion in the liquid permits sensory restriction, not only by sight and hearing, but also of touch and interoception of temperature.

Out-of-Body Experience (OBE)

OBEs are described as the feeling of being “awake and seeing one’s body and the world from a location outside the physical body” from the perspective of “a second own body”, with the possibility of eventually losing sight of the “real body” and floating in complete distinct scenarios with unusual dreamlike visualizations (Blanke, Landis, Spinelli, & Seeck, 2004). Unlike in dreams, the memories of the OBEs can be very intense and long-lasting. OBEs are experienced as if they were extremely real, with intact tridimensional qualities (Blanke & Mohr, 2005; Blanke, Landis, Spinelli, & Seeck, 2004; Brugger, 2002; Mohr, Blanke, & Brugger, 2006). The experience of autoscopy (AS) is limited to the vision of one’s own body in the extrapersonal space during awakeness, without further modifications of the point of

view, that lays within the intact boundaries of the physical body (Blanke, et al.; 2004). OBE and AS are classified as autoscopic phenomena (Brugger P., Regard M., Landis T.; 1997). OBE/AS occur once in a lifetime with prevalence of around 10% in the healthy population (Blanke, et al., 2004).

AS is caused by various neurological conditions, like epilepsy, cefaleia (during an aura) (Comfort, 1982; Sacks, 1995), and other temporal lobe and limbic instability (Bear, 1979; Fauget, 1979; Gloor, 1986; Gloor, Olivier, Quesney, Andermann & Horowitz, 1982; Halgren, Walter, Cherlow, & Crandall, 1978; Sacks, 1995; Siegel, 1977, 1980), neoplasia, infarction and infection (Brugger et al., 1997; Denning & Berrios, 1994; Grüsser & Landis, 1991; Podoll & Robinson, 1999), and psychiatric conditions like schizophrenia, depression, anxiety and dissociation (Denning & Berrios, 1994).

OBEs can occur spontaneously: during childbirth (Bateman, Jones, & Jomeen, 2017), in stress-response to life-threatening events, in NDEs (Appleby, 1989; Noyes & Kletti, 1976, 1977), under the effect of hallucinogenic and/or dissociative substances (Timmermann, Roseman, Williams, Erritzoe, Martial, et al., 2018), and during deep relaxation (Alvarado, 2000). OBEs can be induced by hypnosis (Tressoldi, Pederzoli, Melloni, Ferrini, Richeldi, et al., 2014). Ehrsson invented a mannequin device capable of inducing OBEs and, by the same paradigm, extending haptic sensitivity of the subjects to the mannequin (Preuss & Ehrsson, 2019).

Near-Death Experiences (NDEs)

More than 10% of the survivors of cardiac arrest report visions and internal perceptions, including OBEs (Greyson, 2003; van Lommel, van Wees, Meyers, & Elfferich, 2001). Such 10% prevalence is consistent in sufferers of other critical illness (Zingrone, 2009) and traumatic events (Greyson, 2014). References to OBEs are inter-cultural.

Although there is no consensus about the phenomenology of NDEs (Timmermann et al.; 2018), common traits include: inner peace; traveling through a dark or “empty” region of space (normally described as a tunnel); the impression of being in a “second body” - distinct from the physical body; the perception of people in the surroundings; 360° vision; sensation that time passes faster or slower; amplification of various sensory perceptions; visions of a bright light; entering another supernatural realm; communicating with sentient entities (Greyson, 1983; Martial, Cassol, Antonopoulos, Charlier, Heros, Donneau, et al., 2017; Moody, 1975; Ring, 1980). This phenomenological field is shared with non-traumatic ASC, such as those induced by hallucinogenic and/or dissociative substances (Timmermann et al., 2018), and meditation (Beauregard, Courtemanche, & Paquette, 2009).

Hallucinations with the appearance of deceased relatives are considered as a sign of imminent death in diagnostic manuals for hospital personnel (Dunn & Milch, 2002; LeGrand & Walsh, 2010). The occurrence of terminal delirium (normally between 48 and 72 hours before death: Back, 1992), a condition including hallucination and psychomotor agitation (Bush, Leonard, Agar, Spiller, Hosie, et al., 2014) is estimated in hospitals in the 88% of the terminal patients, in the hours and days previous to death, though not always correctly identified clinically (Lawlor, Gagnon, Mancini, et al., 2000).

Terminal lucidity is the sporadic and inverse phenomenon: there exist few reports, of patients with psychiatric conditions who experience a gradual remission of symptoms and recuperation of memory; these phenomena started around a month before death and sometimes reached a semi-total recuperation close to the final hours. Documented case studies are mainly from the 19th century, counting only 11 case studies from 1950 to 2009 (Nahm & Greyson, 2009). However “70% of caregivers in a nursing home reported that during the past five years, they had observed patients with dementia becoming lucid a few days before death” (Brayne, Lovelace, & Fenwick, 2008). Another recent survey of nursing

home staff reported that “interviewees from all units reported first-hand accounts of previously confused residents suddenly becoming lucid enough in the last days of life to recognize and say farewell to relatives and carers” (Fenwick, Lovelace, & Brayne, 2010). Furthermore, “there exist 17 general statements by psychiatrists, other physicians, or caregivers who reported that they had observed several examples of terminal lucidity in mental disorders, but without giving concrete details of the cases” (Nahm & Greyson, 2009).

Case studies include cerebral abscess, tumors, cerebral vascular accidents, meningitis, dementia, Alzheimer, schizophrenia and affective disorders. Sometimes improvements were sudden, and some patients awakened after prolonged loss of consciousness (Fenwick, Lovelace, & Brayne, 2010; Nahm & Greyson 2009; Nahm, Greyson, Kelly, & Haraldsson, 2012).

ASC and psychopathology

Recent research in cognitive neurosciences confirms that hallucinations are not necessarily associated to underlying psychopathology, nor so are ASC (Braithwaite, Samson, Apperly, Brogna, & Hulleman, 2011). Rather, proneness to sensory anomalies and hallucination is integrated as to lay on a continuum within pathology and normality (Bentall, 1990; Lopez Rodrigo, Paino Pineiro, Martinez Suarez, Inda Caro, & Giraldez, 1997; Mohr and Blanke, 2005; Slade & Bentall, 1988; Strauss, 1969; Van Os, Hanssen, Bijl, & Ravelli, 2000; Verdoux & Van Os, 2002).

Thus, the observation of ASC is sometimes used to formulate psychiatric hypothesis about mental functioning (Studerus, Gamma & Vollenweider, 2010). For instance, “Stahl’s Essential Psychopharmacology” (Stahl, 2013, p. 561) mentions the transient psychotomimetic effects - that is, capable of mimicking psychosis - of the psychoactive substance phencyclidine (PCP, or “angel dust”), or of the delirium resulting from chronic abuse of

stimulants (cocaine and amphetamine). The recent revival of psychedelic psychotherapy proposes that pharmacologically-induced ASC and mystical experience may facilitate an enduring improvement in life quality (in terms of mood, attitudes, and constructive behaviours) (Barrett & Griffiths, 2017; Johnson, Hendricks, Barrett, & Griffiths, 2019), and “treatment of psychological distress associated with life-threatening diseases, depression, and addiction nicotine and alcohol” (Barrett & Griffiths, 2017; Belouin & Henningfield, 2018; Bogenschutz & Ross, 2016; Doblin, Christiansen, Jerome, & Burge, 2019; Johnson, Hendricks, Barrett, & Griffiths, 2019).

Absorption

ASC are proposed to be described along four dimensions: activation, extension of awareness span, self-awareness, and sensory dynamics (Vaitl et al., 2005). The awareness span is defined by the nature of the contents accessible to the attentional focus, that can extend from one single thought to the “whole of the universe” (Vaitl et al., 2005). The attentional phenomenon of absorption is described on the basis of attentional phenomena that can encompass modifications in the awareness span, that is absorption refers to an intensely focused attention on imaginary or sensory experiences that leads to changes in the sense of self, space, and time (Dal Cin, Hall, & Lane, 2016; Tellegen & Atkinson, 1974).

Some people are more prone to experiencing absorbed states than others; therefore absorption exists along a personality trait continuum. The personality trait of absorption was first proposed by Tellegen and Atkinson (1974), and an instrument to measure it was developed: the Tellegen Absorption Scale (TAS). The authors noted that absorption is a “cognitive-motivational” personality trait reflecting the propensity for “absorbed states”, which result from specific attentional processes. Trait Absorption correlates with hypnotic susceptibility.

“Fascination” is one possible synonym for “absorbed state” (Tellegen & Atkinson, 1974). These states do typically occur in quiet, effortless conditions, devoid of significant activity, planning, and decision making (Tellegen, 1981). An absorbed state is reached by the focus of “total attention during which the available representational apparatus seems to be entirely dedicated to experiencing and modeling the attentional object, be it a landscape, a human being, a sound, a remembered incident, or an aspect of one's self.” (Tellegen & Atkinson, 1974). Thus absorption features “the capacity for marked restructuring of one’s phenomenal field, especially the self and its boundaries” (Tellegen, 1992).

Examples of items of the TAS are: “I can sometimes recollect certain past experiences in my life with such clarity and vividness that it is like living them again or almost so.” “I am sometimes able to forget about my present self and get absorbed in a fantasy that I am someone else.” “If I wish, I can imagine that my body is so heavy that I could not move it if I wanted to.” “I enjoy—or would enjoy—getting beyond the world of logic and reason to experience something new and different.”.

The multimodal nature of absorption might depend on the Freudian mechanism of “condensation”, being “an important ingredient of creativity, particularly image-oriented, artistic creativity” (Tellegen & Atkinson, 1974). Absorption ascribes to various non-ordinary experiences reported in meditation, expanded awareness, peak experiences (Maslow, 1968), mysticism (for an empirical study: Spanos & Moretti, 1988), esthetic experience, regression in the service of the ego, altered states of consciousness, and effects of psychoactive substances (PASs) (Tellegen & Atkinson, 1974).

Full immersion in activities that are challenging - but within the capabilities of the subject - elicits the experience of “flow”, which has been studied as a promoter of work and sports performance. Flow in work and sports is often considered an absorbed state due to the intrinsic pleasure of the activity, diminished awareness of time, and loss of the sense of self

(Csikszentmihalyi & Csikszentmihalyi, 1988). In the experience of flow there is greater motor and mental activity, and purposefulness, than in “absorbed states” as they are normally thought about, that is, as largely passive and contemplative (Tellegen, 1981).

Although everyday life absorbed states are not necessarily ASC, the personality trait of absorption might facilitate the occurrence of ASC. In a factor analysis of the TAS (Jamieson, 2005), one factor emerged, which was named “Altered States of Consciousness,” and includes the following items: “Sometimes I feel as if my mind could envelop the whole world.” “I think I really know what some people mean when they talk about mystical experiences” “I sometimes step outside myself and experience an entirely different state of being”. “Sometimes I experience things as if they were doubly real.” However, only a deep absorbed state can be considered an ASC. In ASC, according to Wittmann (2015), “time consciousness and self-consciousness are prominently modulated: such ego and time modulations, in extreme cases induce a joint dissolution of the notions of self and time”.

Theories of absorption and ASC in sex

Trait absorption. It is not clear to what extent trait absorption relates to sexual function, although some studies suggest that it might have a role, at least in some dimensions of sexual function. Sexual arousability was associated with the ability to engage in mental imagery (Harris, Yulls, & Lacoste, 1980), which is a characteristic of trait of absorption. A personality trait that overlaps conceptually with absorption is “Creative Self-Forgetfulness”, which was modestly associated with higher sexual desire in women and men (Costa, Oliveira, Pestana, & Costa, 2016; Costa, Pestana, & Costa, 2018). Consistency of female orgasm during sexual intercourse was related to hypnotic susceptibility (Bridges, Critelli, & Loos, 1985), which is a consistent correlate of trait absorption. Hypnotic susceptibility was also correlated with liking to be carried away by the effects of alcohol, and lack of control over

movements and thoughts near the end of coitus (Bridges, Critelli & Loos, 1985), which suggests people more prone to hypnotic states (and perhaps absorption more in general) are more likely to get absorbed in pleasures, sexual and others.

Mindfulness meditation. Mindfulness meditation training is practiced by focusing attention and awareness on the present moment, and it was shown to improve sexual desire, arousal and satisfaction in women (Brotto & Basson, 2014). In mindfulness, the attentional focus could elicit states of absorption, of which meditation is one possible trigger according to Tellegen & Atkinson (1974). Mindfulness is applied to sex therapy, especially for female non-organic sexual dysfunctions (Mize, 2015). Mindfulness meditation may increase trait absorption (Bowden, Gaudry, An, & Gruzelier, 2012), but it is presently unclear if putative increases in propensity for absorption caused by mindfulness are a mechanism that helps in improving sexual function.

Absorbed states. Higher sexual responsiveness is associated with ASC (states of high absorption), as indicated by absorption in bodily sensations concomitant with loss of time awareness (Costa, Pestana, et al. 2016). Other aspects of ASC that can result from intense absorption are commonly reported as feelings of unity with the environment, affective states of profound peace and love, spiritual experiences and insightfulness. It is presently unclear how these states related to sexual functioning. One aim of the present study is to clarify this question.

The OAV - *The Altered States of Consciousness Rating Scale* (Studerus, Gamma, & Vollenweider, 2010) will be used in this review as an instrument to define deep absorbed states during sex in terms of ASC. The OAV was “applied internationally in approximately 70 experimental studies” - measuring the alteration of consciousness elicited by different kinds

of sensory and pharmacological stimulation (Studerus, Gamma, & Vollenweider, 2010). In particular, among the 11 sub-scales of the OAV, the most appropriate for the experience of sex seem to be: Blissful State, Experience of Unity, Spiritual Experience and Insightfulness. The items composing each of the four dimensions are listed as follows. Blissful State: “I enjoyed boundless pleasure.” “I experienced a profound peace in myself.” “I experienced an all-encompassing love.”

Experience of Unity: “Everything seemed to unify into a oneness.” “It seemed to me that my environment and I were one.” “I experienced a touch of eternity.” “Conflicts and contradictions seemed to dissolve.” “I experienced past, present and future as an oneness”.

Spiritual Experience: “I had the feeling of being connected to a superior power.” “I experienced a kind of awe.” “My experience had religious aspects.”

Insightfulness: “I felt very profound.” “I gained clarity in connections that puzzled me before.” “I had very original thoughts.”

Follows an overview of the theories referring to ASC as normal outcomes of sexual activity.

Swartz (1994) - cognitive theory of human sexual response. Swartz (1994) developed a cognitive theory of human sexual response on the premise that all sexual activity is based on the attentional focus, necessary for sexual arousal. Such alteration in one’s attention facilitates the access to absorbed states, and vice versa: absorption in erotic stimuli, imagination, or both, can elicit arousal.

The extent of the alteration of ordinary perception would relate to the depth of the state of absorption in the intercourse. The phenomenological field would encompass heightened focus in bodily sensations, reduction in attention towards the surroundings, and alteration in the perception of time, that can slow down during the act or even suspend or disappear from

cognition when experiencing orgasm. According to the author, these alteration would be inherent to “sexual trance”, as described by Mosher (1980).

Absorption in the orgasm would increase sexual satisfaction. Moreover, the state of absorption in sex would be deepened by orgasm, furthering pre-existing sensory alteration. Thus, the physiological orgasm could add stronger alterations to the previous absorbed state with lessened sense of time and space: “especially sensations of merging (loosening or dissolution of personal boundaries) and floating and flying (Swartz, 1994, p. 246). These observations would reflect the OAV scale of Experience of Unity.

Mosher (1980) introduced the Theory of Involvement. Mosher (1980) introduced the *Theory of Involvement in Three Dimensions of Depth of the Human Sexual Response*. The Theory of Involvement was applied to Gestalt sex therapy (Mosher 1977, 1979a, 1979b), based on Awareness, that is “acceptance and attention” towards one’s inner sensations. Awareness would improve communication and quality of the sexual intercourse: healthy sexuality would be based on awareness of one’s needs and attitudes, and on the accommodation with the partner’s needs, in order to reach mutual satisfaction (Mosher, 1977).

The Three Dimensions of Depth are an extension of a model for hypnotic susceptibility, describing states of consciousness with progressive absorption (Mosher, 1980). According to Mosher (1980), the subjective experience of the sexual intercourse depends on the dynamics of physical stimulation and the depth of the involvement in the intercourse that can occur along three main dimensions: “sexual role enactment” (enjoying the performance), relationship closeness, and sexual trance. There are individual differences in the degree of preference for each dimension. The depth of the involvement would be mediated by the congruency of one’s preference with actual experience across the dimensions: the sexual role,

the quality of the relationship with the partner, and the “sexual trance”, that is the level of attentional absorption into the intercourse - with variable depth during the same intercourse, and along the course of the relationship. The sexual role enactment depends on the subjective differences that exist in sexual style, expectations and preferences, and it should be mediated with the partner.

A “spiritual” approach to the sexuality normally focuses explicitly on the depth of the sexual trance: the setting for the intercourse requires absence of distractions, relaxed and receptive mood, repetitive -almost ritualistic- sexual techniques, and inward attention onto sensations and erotic imagination. Therefore setting, rhythm, and attentional focus are optimal for the induction of deep absorbed states.

According to Mosher (1980), the participants in entranced sexual encounters report the planned intent to reach a “union” between partners, which is experienced through a “trip” or an ASC, sometimes evoking the imagination of archetypical scenes. “Feelings are oceanic. The experience is described as peak.” Orgasm favors the temporary “loss of consciousness and volition”. However, deep sexual trance could transcend the orgasmic pleasure, that could be overlooked by men (Mosher, 1980). These experiences seem inherent to the OAV sub-scales of Experience of Unity and Blissful State.

The furthest reach of such sexual trance would be the “unusual and infrequent Sexual Ecstasy”: “transpersonal experiences [...that can] transform” the perception of time (“distorted and eternal”), of exterior space, and of ordinary internal attributions (“sensations are exquisitely amplified yet pure and subtle”, embrace for one’s body is lost in an erotic dimension, the body smells attractive instead of disgusting...). The sense of Self could be temporarily lost (Mosher, 1980). Deeper ASC would include overtones described by OAV sub-scale of Spiritual Experience.

The Model of Involvement was firstly based on qualitative observations by the author (Mosher, 1979b). It was later validated with quantitative methodology in samples of 141 participants (21 women) (Green & Mosher, 1985) and 241 participants (121 women) (Mosher, Barton-Henry & Green, 1988). A following study (Mosher, Barton-Henry & Green, 1988) validated the MISSA - *Multiple Indicators of Subjective Sexual Arousal*. However, the internal validity of MISSA - the way it was determined by the authors - suffered procedural errors, in spite of an adequate reliability (Talmadge & Talmadge, 1990).

Maslow (1959) - Sex as peak experience. Mosher was inspired by Maslow's theories in humanistic and Gestalt psychotherapy (Mosher, 1981). Maslow (1959) maintained that sex is one of the ways to reach a "peak experience", an absorbed state with immense satisfaction and self-actualization, allowing for a positive cognitive restructuring in regards to the self and to life. Accordingly, a possible physical reaction to a peak experience, such as "beautiful sex", "is relaxation, peacefulness, quietness, the feeling of stillness" (Maslow, 1959), reflecting the OAV dimension of Blissful State.

Maslow's methodology studying the "peak experience" was mainly phenomenological: in his empirical self-report studies (Maslow, 1993, p.169-170), sex and music were rated by participants as the stimuli most easily eliciting a "peak experience". Indeed music was later observed to alter consciousness, although empirical research is at an "infant state" (Schäfer, Fachner, & Smukalla, 2013).

Metz & McCarthy (2007) - the Good-Enough Sex Model. Metz & McCarthy (2007) developed the *Good-Enough Sex Model* for couple sexual satisfaction. A healthy sexual life, at the last dimension of the model, is experienced when "Sexuality is personalized": "Sex can be playful, spiritual, special". "Spiritual union" in "special sex" "has the potential to

acknowledge with respect and acceptance the complexity and ambiguity of life, the multiple levels of reality, the spiritual dimension, and the priority on interpersonal connection.” The model is centered in “validating alternative sensual and erotic scenarios”: the mention of spiritual outcomes appears compatible especially with the Experience of Unity and Spiritual Experience sub-scales of the OAV. The authors do not refer explicitly to ASC, but do quote The Model of Involvement (Mosher, 1980) to underline the importance of attentional focus to modulate the experience. “Sexual self-entrancement” (Metz & McCarthy, 2007) seems to refer to possible absorbed states during the intercourse.

Passie, Hartmann, Schneider & Emrich (2003) - Hyperventilation. Passie, Hartmann, Schneider & Emrich (2003) proposed hyperventilation as a mechanism of intensification of the sexual experience. Groaning and accelerated breathing would induce hypocapnia, a state of reduced carbon dioxide in the blood. One consequence would be a reduction in cortical function, favoring limbic influences, such as emotional alterations. Lowered alertness (Burden, Janke & Brighthouse, 1994) could contribute to explain lessened sense of time, space and Self.

In addition, short hyperventilation can trigger peak anxiety in predisposed individuals - like in panic attacks (Spinhoven, Onstein,, Sterk & Le Haen-Versteijnen, 1992), causing eventually dysphoric mood, de-realization and alterations in interoception (Lazarus, & Kostan, 1969): a possible contribution to explain non-organic sexual dysfunctions.

Psychedelic psychotherapy in the 1950s used carbogen, a non-asphyxiating mixture of CO₂ and O₂, that would initially provoke strong anxiety by physiological reactions in the majority of the patients, but then elicit quick psychedelic ASC with hallucinations and insights (Meduna, 1950). Prolonged hyperventilation can induce deeper alterations of mood and consciousness, like in tribal rituals (Lee, 1968), more recently integrated into

transpersonal psychology (Lee & Speyer, 1996). Holotropic breathing (Grof, Grof & Kornfield, 2003) is such a technique capable of inducing deep and extended ASC characterized by introspection and hallucinations.

Self-transcendence. The experience of Self-transcendence, “transient mental states marked by decreased self-salience and increased feelings of connectedness is thought to be elicited by mindfulness, flow, peak experiences, mystical-type experiences, and certain positive emotions (e.g., love, awe)” (Yaden, Haidt, Hood, Vago, & Newberg, 2017), most of which would be invoked during a “sexual ecstasy”. Awe is thus mentioned in this review as a possible component of deep ASC during sex. Actually, one item of Spiritual Experience scale states: “I experienced a kind of awe.” Being awe the need to accommodate the perceived vastness of the experience within the “small self”, involving cognitive restructuring (Cohen, A. B., Gruber, & Keltner, 2010), awe could also explain the Insightfulness reported during ASC in sex.

Empirical evidence for absorption in sex

Consistency of female orgasm during coitus was associated to the predisposition to absorbed states, in terms of hypnotic suggestibility, enjoying the feeling of being “carried away” by alcohol, and lack of control of movements and thoughts near the end of the coitus (Bridges, Critelli, & Loos; 1985). Costa, Pestana, Costa, & Wittmann (2016) tested Swartz’s hypotheses of sexual response (1994) empirically with self-report questionnaires about the experience in the last sexual relation and found confirmation for them. For both men and women, greater body awareness correlated strongly with greater desire, arousal, and satisfaction, but for women more strongly so. Occurrence of orgasm correlated strongly with body awareness in women, but only moderately in men. In women, loss of time awareness

correlated strongly with desire, arousal, orgasm, and satisfaction, but in men, only satisfaction correlated moderately with loss of time awareness. The correlations between sexual responses and loss of awareness of surrounding space were somewhat stronger for men, but modest.

Female orgasm from vaginal intercourse, without clitoral masturbation (sometimes called vaginal orgasm) correlated in previous research to higher sexual desire and satisfaction, more consistently than noncoital sexual behaviours (Brody, 2007; Brody & Weiss, 2011; Nutter & Condron, 1983; Tao & Brody, 2011). More attentional focus on vaginal sensations during intercourse was related to greater capacity to attain vaginal orgasm (Brody & Weiss, 2010). In Costa, Pestana et al. (2016) vaginal orgasm was related to time passing subjectively faster. Orgasm during vaginal intercourse with clitoral masturbation, instead, correlated with a stronger focus on body awareness, but was uncorrelated with the sense of time and space. Absorbed states did “not appear to be important for female orgasm from partnered non-coital sex.”

Costa, Pestana et al. (2016) concluded that absorption during sex “is an extreme, as well as special, form of “flow” - which is typically accompanied by a loss of time and the surrounding space. Similarly, absorption during sex means that one loses track of time and space, [...] though within more pleasurable states”

Orgasm was reported as a possible inductor of visual synesthesia in the normal population (Nielsen, Kruger, Hartmann, Passie, Fehr, & Zedler; 2013). Audio-Visual Synesthesia is a phenomenon that occurs on neural basis without any special stimulation in the 4% of the population, called Synaesthetes (Simner, Mulvenna, Sagiv, Tsakanikos, Witherby, Fraser, et al.; 2006). Synesthesia consists in a cross-modal perception of one stimulus.

As observed empirically by Simner et al. (2016), female synaesthetes with synaesthetic sexual experience reached a deeper state of sexual trance without, however, having enhanced

satisfaction in their sex lives. Qualitative interviews identified “an unsatisfactory feeling of isolation caused by difficulties telling partners about their otherwise rewarding synaesthetic experiences.

Summary. ASC are a widespread phenomenon, that can occur spontaneously with different depth. Proneness to hallucination, sensory alteration and creative restructuring of the self is deemed to vary along a continuum between high or low susceptibility in normal population (Bentall, 1990; Lopez Rodrigo et al., 1997; Mohr and Blanke, 2005; Slade and Bentall, 1988; Strauss, 1969; Van Os et al., 2000; Verdoux & Van Os, 2002).

The MODTAS (Jamieson, 2005) is the most updated instrument to measure the personality trait of absorption (Tellegen & Atkinson, 1974), that is the proneness to experience absorbed states. Absorbed states are mental states caused by the intense attention towards imagination and sensory experiences, which can lead to changes in the perception of self, space, and time (Dal Cin, Hall, & Lane, 2016, Tellegen & Atkinson, 1974). “Absorbed states” may be a more appropriate definition than ASC for transient modulations of attention with minor effects of dissolution of the Self and divergence from conscious awareness, such as daydreaming, artistic creativity and vivid imagination; however, deeply absorbed states can overlap with ASC.

The importance of absorbed states in sex, consistently with Swartz’s model of human sexual response (1994), was confirmed empirically (Costa, Pestana, et al., 2016). There is speculation in scientific and sex therapy literature about the ontogenesis and function of ASC during sex (Maslow, 1959; Mosher, 1980; Metz & McCarthy, 2007; Passie, Hartmann, Schneider, & Emrich, 2003; Swartz, 1994). There are qualitative reports about the occurrence of ASC during sex (peak experience: Maslow, 1959; sexual trance: Mosher, 1980; spiritual experience: Metz & McCarthy, 2007; sexual synaesthesias: Nielsen, Kruger, Hartmann,

Passie, Fehr, & Zedler, 2013, Simner et al., 2016; absorbed states: Swartz, 1994). However quantitative research is lacking about prevalence and features of ASC in sex.

Correlations were observed between sexual response (satisfaction and desire) and altered states of deep absorption into the sexual intercourse, especially with lessened time awareness (Costa, Pestana, et al.; 2016). Other correlations were observed between sexual response (arousal and desire) and measures analogue to trait absorption, namely Creative Self-Forgetfulness (Costa, Oliveira, et al. 2016). Though, the correlations between the trait of absorption and sexual response are yet to be studied, as well as the correlation between trait absorption and ASC during sex. That will be an aim of the present work.

References

- Alvarado, C. (2000). Out of body experiences. In Cardena, E., Lynn, J., & Krippner, S. (Eds.), *Varieties of Anomalous Experience: Examining the Scientific Evidence* (pp. 183-218). Washington, DC: American Psychological Association.
- Appleby, L. (1989). Near death experience: Analogous to other stress induced phenomena. *British Medical Journal*, 298, 976-977.
- Bateman, L., Jones, C., & Jomeen, J. (2017). A Narrative Synthesis of Women's Out-of-Body Experiences During Childbirth. *Journal of Midwifery & Women's Health*, 62: 442-451. doi: 10.1111/jmwh.12655
- Bear, D. M. (1979). Temporal lobe epilepsy: A syndrome of sensory-limbic hyperconnection. *Cortex*, 15, 357-384.
- Bentall, R. P. (1990). The illusion of reality: A review and integration of psychological research on hallucination. *Psychological Bulletin*, 107, 82-95.
- Beauregard, M., Courtemanche J., Paquette, V. (2009). Brain activity in near-death experiencers during a meditative state. *Resuscitation*, 80(9), 1006-1010
- Back, I.N. (1992). Terminal restlessness in patients with advanced malignant disease. *Palliative Medicine*, 6, 293-298.
- Barrett, F. S., & Griffiths, R. R. (2017). Classic Hallucinogens and Mystical Experiences: Phenomenology and Neural Correlates. (Eds.) In *Behavioral Neurobiology of Psychedelic Drugs* (pp. 393–430). Springer Berlin Heidelberg. https://doi.org/10.1007/7854_2017_474

- Belouin, S. J., & Henningfield, J. E. (2018). Psychedelics: Where we are now, why we got here, what we must do. *Neuropharmacology*, 142, 7–19. <https://doi.org/10.1016/j.neuropharm.2018.02.018>
- Bogenschutz, M. P., & Ross, S. (2016). Therapeutic Applications of Classic Hallucinogens. (Eds.) In *Behavioral Neurobiology of Psychedelic Drugs* (pp. 361–391). Springer Berlin Heidelberg. https://doi.org/10.1007/7854_2016_464
- Blanke, O., Landis, T., Spinelli, L., & Seeck, M. (2004). Out-of-body experience and autoscopia of neurological origin. *Brain*, 127(2), 243–258.
- Blanke O. & Mohr C. (2005) Out-of-body experience, heautoscopy, and autoscopic hallucination of neurological origin. Implications for mechanisms of corporeal awareness and self consciousness. *Brain Research Reviews*, 50: 184–199.
- Block, R. A. (1979). Time and consciousness. In Underwood, G., & Stevens, R. (Eds.). *Aspects of consciousness* (Vol. 1, pp. 179–217). London: Academic Press.
- Braithwaite, J. J., Samson, D., Apperly, I., Brogna, E., & Hulleman, J. (2011). Cognitive correlates of the spontaneous out-of-body experience (OBE) in the psychologically normal population: Evidence for an increased role of temporal-lobe instability, body-distortion processing, and impairments in own-body transformations. *Cortex*, 47(7), 839–853. <https://doi.org/10.1016/j.cortex.2010.05.002>
- Brayne S, Lovelace H, & Fenwick P. (2008). End-of-life experiences and the dying process in a Gloucestershire nursing home as reported by nurses and care assistants. *American Journal of Hospice and Palliative Care*, 25, 195–206.
- Bridges, C. F., Critelli, J. W., & Loos, V. E. (1985). Hypnotic susceptibility, inhibitory control, and orgasmic consistency. *Archives of Sexual Behavior*, 14, 373–376.
- Brody, S. (2007). Vaginal orgasm is associated with better psychological functioning. *Sexual and Relationship Therapy*, 22, 173–191.
- Brody, S., & Weiss, P. (2010). Vaginal orgasm is associated with vaginal (not clitoral) sex education, focusing mental attention on vaginal sensations, intercourse duration, and a preference for a longer penis. *Journal of Sexual Medicine*, 7, 2774–2781.
- Brody, S., & Weiss, P. (2011). Simultaneous penile-vaginal intercourse orgasm is associated with satisfaction (sexual, life, partnership, and mental health). *Journal of Sexual Medicine*, 8, 734–741.
- Brotto, L. A., & Basson, R. (2014). Group mindfulness-based therapy significantly improves sexual desire in women. *Behavioral Research and Therapy*, 57, 43–54.
- Brugger P., Regard M., & Landis T. (1997). Illusory reduplication of one's own body: Phenomenology and classification of autoscopic phenomena. *Cognitive Neuropsychiatry*; 2: 19–38.

Brugger P. (2002). Reflective mirrors: Perspective-taking in autoscopic phenomena. *Cognitive Neuropsychiatry*, 7(3): 179-194.

Burden, R. J., Janke, E. L., & Brighthouse, D. (1994). Hyperventilation-induced unconsciousness during labour. *British Journal of Anaesthesia*, 73(6), 838–839. <https://doi.org/10.1093/bja/73.6.838>

Bush, S. H., Leonard, M. M., Agar, M., Spiller, J. A., Hosie, A., Wright, D. K., ... Lawlor, P. G. (2014). End-of-Life Delirium: Issues Regarding Recognition, Optimal Management, and the Role of Sedation in the Dying Phase. *Journal of Pain and Symptom Management*, 48(2), 215–230. <https://doi.org/10.1016/j.jpainsymman.2014.05.009>

Csikszentmihalyi, M., & Csikszentmihalyi, I. S. (1988). *Optimal experience: psychological studies of flow in consciousness*. Cambridge: Cambridge University Press.

Comfort, A. (1982) Out of body experiences and migraine. *American Journal of Psychiatry*, 139(10): 1379-1380.

Cohen, A. B., Gruber, J., & Keltner, D. (2010). Comparing spiritual transformations and experiences of profound beauty. *Psychology of Religion and Spirituality*, 2(3), 127–135. <https://doi.org/10.1037/a0019126>

Costa, P. T., Jr., Fagan, P. J., Piedmont, R. L., Ponticas, Y., & Wise, T. N. (1992). The five-factor model of personality and sexual functioning in outpatient men and women. *Psychiatric Medicine*, 10, 199–215.

Costa, R. M., Oliveira, T. F., Pestana, J., & Costa, D. (2016). Self-transcendence is related to higher female sexual desire. *Personality and Individual Differences*, 96, 191–197. doi: 10.1016/j.paid.2016.02.078

Costa, R. M., Pestana, J., & Costa, D. (2018). Self-transcendence, sexual desire, and sexual frequency. *Journal of Sex & Marital Therapy*, 1-5. doi: 10.1080/0092623X.2017.1314397

Costa, R. M., Pestana, J., Costa, D., & Wittmann, M. (2016). Altered states of consciousness are related to higher sexual responsiveness. *Consciousness and Cognition*, 42, 135-141. doi.org/10.1016/j.concog.2016.03.013

Dal Cin, S., Hall, M.P., & Lane, D.S. (2016) Absorption. In: Zeigler-Hill V., Shackelford T. (eds) *Encyclopedia of Personality and Individual Differences*. Springer, Cham

Dening T. R., Berrios G. E. (1994). Autoscopic phenomena. *British Journal of Psychiatry*; 165: 808-17.

Dittrich, A. (1998). The standardized psychometric assessment of altered states of consciousness (ASCs) in humans. *Pharmacopsychiatry* 31: 80–84. 10.1055/s- 2007-979351.

Doblin, R. E., Christiansen, M., Jerome, L., & Burge, B. (2019). The Past and Future of Psychedelic Science: An Introduction to This Issue. *Journal of Psychoactive Drugs*, 51(2), 93–97. <https://doi.org/10.1080/02791072.2019.1606472>

Dotan Ben-Soussan, T., Mauro, F., Lasaponara, S., Glicksohn, J., Marson, F., Berkovich-Ohana, A. (2019). Fully immersed: State absorption and electrophysiological effects of the OVO Whole-Body Perceptual Deprivation chamber. *Progress in Brain Research*, 244, 165-184. 10.1016/bs.pbr.2018.10.023.

Dunn G. P., Milch R. A. (2002). Is this a bad day or one of the last days? How to recognize and respond to approaching demise. *Journal of the American College of Surgeons*, 195(6): 879-887.

Fenwick, P., Lovelace, H., Brayne, S., 2010. Comfort for the dying: five year retrospective and one year prospective studies of end of life experiences. *Arch. Gerontol. Geriatr.* 51, 173–179.

Gloor P. (1986). Role of the human limbic system in perception, memory, and affect: Lessons from temporal lobe epilepsy. In Doane, B. K. & Livingstone, K. E. (Eds), *The Limbic System: Functional Organization and Clinical Disorders* (pp. 159-169). New York: Raven Press.

Gloor P., Olivier A., Quesney L. F., Andermann F., and Horowitz S. (1982). The role of the limbic system in experiential phenomena of temporal lobe epilepsy. *Annals of Neurology*, 12(2): 129-144.

Green C. E. (1968). *Out-of-body experiences*. Oxford: Institute of Psychophysical Research.

Green, S. E., & Mosher, D. L. (1985). A causal model of sexual arousal to erotic fantasies. *The Journal of Sex Research*, 21(1), 1–23. <https://doi.org/10.1080/00224498509551241>

Greyson, B. (1983). The near-death experience scale. Construction, reliability, and validity. *J. Nervous Mental. Disorders*, 171, 369–375. doi: 10.1097/00005053-198306000-00007

Greyson, B. (2003). Incidence and correlates of near-death experiences in a cardiac care unit. *General Hospital Psychiatry*, 25(4), 269-276

Greyson, B. (2014). "Chapter 12: Near-Death Experiences". In Cardeña, Etzel; Lynn, Steven Jay; Krippner, Stanley (Eds.). *Varieties of anomalous experience: examining the scientific evidence* (2nd ed., pp. 333–367). Washington, D.C.: American Psychological Association.

Grof, S., Grof, C., Kornfield, J. (2010). *Holotropic Breathwork: A New Approach to Self-Exploration and Therapy*. New York, NY; State University Press of New York (Suny)

Grüsser, O. J., & Landis, T. (1991). The splitting of 'I' and 'me': heautoscopy and related phenomena. In: Grüsser O. J., Landis T. (Eds.). *Visual agnosias and other disturbances of visual perception and cognition* (pp. 297-303). Amsterdam: MacMillan.

- Harris, R., Yulis, S., & Lacoste, D. (1980). Relationships among sexual arousability, imagery ability, and introversion-extraversion. *Journal of Sex Research*, 16, 72–86.
- Jamieson G. A. (2005). The modified tellegen absorption scale: a clearer window on the structure and meaning of absorption. *Australian Journal of Clinical and Experimental Hypnosis*, 33(2), 119-139
- Johnson, M. W., Hendricks, P. S., Barrett, F. S., & Griffiths, R. R. (2019). Classic psychedelics: An integrative review of epidemiology, therapeutics, mystical experience, and brain network function. *Pharmacology & Therapeutics*, 197, 83–102. <https://doi.org/10.1016/j.pharmthera.2018.11.010>
- Jonsson, K., & Kjellgren, A. (2016). Promising effects of treatment with flotation-REST (restricted environmental stimulation technique) as an intervention for generalized anxiety disorder (GAD): a randomized controlled pilot trial. *BMC Complementary and Alternative Medicine*, 16(1). <https://doi.org/10.1186/s12906-016-1089-x>
- Kjellgren, A., & Westman, J. (2014). Beneficial effects of treatment with sensory isolation in flotation-tank as a preventive health-care intervention – a randomized controlled pilot trial. *BMC Complementary and Alternative Medicine*, 14(1). <https://doi.org/10.1186/1472-6882-14-417>
- Lazarus, H. R., & Kostan, J. J., Jr. (1969). Psychogenic Hyperventilation and Death Anxiety. *Psychosomatics*, 10(1), 14–22. [https://doi.org/10.1016/s0033-3182\(69\)71786-8](https://doi.org/10.1016/s0033-3182(69)71786-8)
- Lee, K. J., Speyer, P. L. (1996). Breathwork: theory and technique. In Scotton, B. W., Chinen, A. B. & Battista, J. R. (Eds). *Textbook of Transpersonal Psychiatry and Psychotherapy* (pp. 366–376). New York: Basic Books. In: Passie et al. (2003).
- Lee, R. D. (1968). The sociology of Kung bushman trance performances. In Prince R. (Eds). *Trance and Possession States* (pp. 35–56). Montreal: R.M. Bucke Memorial Society (pp. 35–56). In: Passie et al. (2003).
- LeGrand, S. B., & Walsh, D. (2010). Comfort Measures: Practical Care of the Dying Cancer Patient. *American Journal of Hospice and Palliative Medicine*, 27(7), 488–493. <https://doi.org/10.1177/1049909110380200>
- Lilly, J. C. (1956). Mental effects of reduction of ordinary levels of physical stimuli on intact, healthy persons. *Psychiatric Research Reports*, 5, 1–9.
- Lopez Rodrigo, A. M., Paino Pineiro, M. M., Martinez Suarez, P. C., Inda Caro, M., & Giraldez, L. (1997). Hallucinations in a normal population: Imagery and personality influences. *Psychology in Spain*, 1(1): 10-16.
- Ludwig, A. M. (1966). Altered States of Consciousness. *Archives of General Psychiatry*, 15(3), 225. <https://doi.org/10.1001/archpsyc.1966.01730150001001>

- Maslow, A. H. (1959). Cognition of Being in the Peak Experiences. *The Journal of Genetic Psychology*, 94(1), 43–66. <https://doi.org/10.1080/00221325.1959.10532434>
- Maslow, A. H. (1968). *Toward a psychology of being*. (2nd ed.) Princeton: Van Nostrand.
- Maslow, A. H. (1993). *The Farther Reach of Human Nature*. New York: Penguin books (Original work published 1971)
- Mazzoni, G., Venneri, A., McGeown, W. J., & Kirsch, I. (2013). Neuroimaging resolution of the altered state hypothesis. *Cortex*, 49(2), 400–410. <https://doi.org/10.1016/j.cortex.2012.08.005>
- Martial, C., Cassol, H., Antonopoulos, G., Charlier, T., Heros, J., Donneau, A. F., et al. (2017). Temporality of features in near-death experience narratives. *Frontiers in Human Neurosciences*, 11, 311. doi: 10.3389/fnhum.2017.00311
- Meduna, L. J. (1950). *Carbon Dioxide Therapy*. Springfield, IL: Charles C. Thomas Publishing.
- Metz, M. E., & McCarthy, B. W. (2007). The «Good-Enough Sex» model for couple sexual satisfaction. *Sexual and Relationship Therapy*, 22(3), 351–362. <https://doi.org/10.1080/14681990601013492>
- Miller-Klein, E., & Golden, M. V. (2018). Vibration isolation of sensory deprivation tanks. *The Journal of the Acoustical Society of America*, 143(3), 1715–1715. <https://doi.org/10.1121/1.5035586>
- Mohr, C. (2018) Are There Varying Depths in Flow?: Altered States of Consciousness, Absorption, and the Brain. *Journal of Consciousness Studies*, 25(11-12), 115-130
- Mohr C., Blanke O., and Brugger P. (2006). Perceptual aberrations impair mental own-body transformations. *Behavioral Neuroscience*, 120(3): 528-534.
- Mosher, D. L. (1977). The gestalt awareness-expression cycle as a model for sex therapy. *Journal of Sex & Marital Therapy*, 3(4), 229–242. <https://doi.org/10.1080/00926237708402990>
- Mosher, D. L. (1979a). Awareness in gestalt sex therapy. *Journal of Sex & Marital Therapy*, 5(1), 41–56. <https://doi.org/10.1080/00926237908403717>
- Mosher, D. L. (1979b). The gestalt experiment in sex therapy. *Journal of Sex & Marital Therapy*, 5(2), 117–133. <https://doi.org/10.1080/00926237908403723>
- Mosher, D. L. (1980). Three dimensions of depth of involvement in human sexual response. *Journal of Sex Research*, 16, 1–42.

- Mosher, D. L. (1981). Reply to money's, Izard's, and Bullough's, comments on Mosher's «three dimensions of depth of involvement in human sexual response». *The Journal of Sex Research*, 17(2), 179–181. <https://doi.org/10.1080/00224498109551112>
- Mosher, D. L., Barton-Henry, M., & Green, S. E. (1988). Subjective sexual arousal and involvement: Development of multiple indicators. *Journal of Sex Research*, 25(3), 412–425. <https://doi.org/10.1080/00224498809551471>
- Nahm, M., & Greyson, B. (2009). Terminal Lucidity in Patients With Chronic Schizophrenia and Dementia. *The Journal of Nervous and Mental Disease*, 197(12), 942–944. <https://doi.org/10.1097/nmd.0b013e3181c22583>
- Nahm, M., Greyson, B., Kelly, E. W., & Haraldsson, E. (2012). Terminal lucidity: A review and a case collection. *Archives of Gerontology and Geriatrics*, 55(1), 138–142. <https://doi.org/10.1016/j.archger.2011.06.031>
- Nielsen, J., Kruger, T. H., Hartmann, U., Passie, T., Fehr, T., & Zedler, M. (2013). Synaesthesia and sexuality: The influence of synaesthetic perceptions on sexual experience. *Frontiers in Psychology*, 751, (4), 1-5. doi: 10.3389/fpsyg.2013.00751
- Noyes R. & Kletti R. (1976). Depersonalization in the face of life threatening danger: A description. *Psychiatry*, 39, 19-27.
- Noyes R. and Kletti R. (1977). Depersonalization in response to life threatening danger. *Comprehensive Psychiatry*, 18, 375-384.
- Nutter, D. E., & Condrón, M. K. (1983). Sexual fantasy and activity patterns of females with inhibited sexual desire versus normal controls. *Journal of Sex & Marital Therapy*, 9, 276–282.
- Ogden, R. S., Wearden, J. H., Gallagher, D. T., & Montgomery, C. (2011). The effect of alcohol administration on human timing: A comparison of prospective timing, retrospective timing and passage of time judgements. *Acta Psychologica*, 138, 254–262.
- Passie, T., Hartmann, U., Schneider, U., & Emrich, H. M. (2003). On the function of groaning and hyperventilation during sexual intercourse: intensification of sexual experience by altering brain metabolism through hypocapnia. *Medical Hypotheses*, 60(5), 660–663. [https://doi.org/10.1016/s0306-9877\(03\)00010-0](https://doi.org/10.1016/s0306-9877(03)00010-0)
- Podoll K., Robinson D. (1999). Out-of-body experiences and related phenomena in migraine art. *Cephalalgia*; 19: 886-896.
- Preuss, N., & Ehrsson, H. H. (2019). Full-body ownership illusion elicited by visuo-vestibular integration. *Journal of Experimental Psychology: Human Perception and Performance*, 45(2), 209-223. <http://dx.doi.org/10.1037/xhp0000597>
- Qualls, P. J. & Sheehan, P. W. (1981). Imagery encouragement, absorption capacity and relaxation during electromyograph biofeedback. *Journal of Personality and Social Psychology*, 41, 370-379.

- Ring, K. (1980). *Life at Death: A Scientific Investigation of the Near-Death Experience*. New York, NY: Harpr Coward McCann and Geoghenan.
- Sacks O. (1955). *Migraine*. London: Picador.
- Schäfer, T., Fachner, J., & Smukalla, M. (2013). Changes in the representation of space and time while listening to music. *Frontiers in Psychology*, 4, 508.
- Siegel, R. K. (1977). Hallucinations. *Scientific American*, 237, 132-140.
- Siegel, R. K. (1980). The psychology of life after death. *American Psychologist*, 35, 911-931.
- Simner, J., Mulvenna, C., Sagiv, N., Tsakanikos, E., Witherby, S. A., Fraser, C., et al. (2006). Synaesthesia: the prevalence of atypical cross-modal experiences. *Perception* 35, 1024–1033. doi: 10.1068/p5469
- Slade, P. D. & Bentall R. P. (1988). *Sensory Deception: Towards a Scientific Analysis of Hallucinations*. London: Croom-Helm.
- Spanos, N. P., & Moretti, P. (1988). Correlates of Mystical and Diabolical Experiences in a Sample of Female University Students. *Journal for the Scientific Study of Religion*, 27(1), 105-116. doi:10.2307/1387405
- Spinhoven, P., Onstein, E. J., Sterk, P. J., & Le Haen-Versteijnen, D. (1992). The hyperventilation provocation test in panic disorder. *Behaviour Research and Therapy*, 30(5), 453–461. [https://doi.org/10.1016/0005-7967\(92\)90029-g](https://doi.org/10.1016/0005-7967(92)90029-g)
- Stahl, S. M. (2013). *Stahl's Essential Psychopharmacology: Neuroscientific Basis and Practical Applications* (4th Edition). New York, NY: Cambridge University Press
- Strauss, J. S. (1969). Hallucinations and delusions as points on a continual function: Rating scale evidence. *Archives of General Psychiatry*, 21: 581e586.
- Studerus, E., Gamma A., Vollenweider, F. X. (2010). Psychometric Evaluation of the Altered States of Consciousness Rating Scale (OAV). *PLoS ONE* 5(8): e12412. doi:10.1371/journal.pone.0012412
- Stumbrys, T., Erlacher, D., Schädlich, M., Schredl, M. (2012). Induction of lucid dreams: a systematic review of evidence. *Conscious Cognition*, 21, 1456–1475. doi: 10.1016/j.concog.2012.07.003.
- Swartz, L. H. (1994). Absorbed states play different roles in female and male sexual response: Hypotheses for testing. *Journal of Sex & Marital Therapy*, 20, 244–253.
- Talmadge, L. D., & Talmadge, W. C. (1990). Sexuality assessment measures for clinical use: A review. *The American Journal of Family Therapy*, 18(1), 80–105. <https://doi.org/10.1080/019261890008250793>

- Tao, P., & Brody, S. (2011). Sexual behavior predictors of satisfaction in a Chinese sample. *Journal of Sexual Medicine*, 8, 455–460.
- Tellegen, A. (1992, August). Note on structure and meaning of the MPQ Absorption scale. *Unpublished manuscript*, University of Minnesota.
- Jamieson G. A. (2005). The modified tellegen absorption scale: a clearer window on the structure and meaning of absorption. *Australian Journal of Clinical and Experimental Hypnosis*, 33(2), 119-139
- Tellegen, A., & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, 83, 268-277.
- Timmermann C., Roseman L., Williams L., Erritzoe D., Martial C., Cassol H., Laureys S., Nutt D., Carhart-Harris R. (2018). DMT Models the Near-Death Experience. *Frontiers in Psychology*, Aug 15(9): 1424. doi: 10.3389/fpsyg.2018.01424.
- Tressoldi, P., Pederzoli, L., Melloni, S., Ferrini, A., Richeldi, F., & Caini, P. (2014). Out of Body Experience induced by hypnotic suggestion. Part 1: phenomenology and perceptual characteristics. *Frontiers in Human Neuroscience*. 8.
- Vaitl, D., Birbaumer, N., Gruzelier, J., Jamieson, G. A., Kotchoubey, B., Kübler, A., et al (2005). Psychobiology of altered states of consciousness. *Psychological Bulletin*, 131, 98–127.
- van Lommel, P., van Wees, R., Meyers, V., & Elfferich, I. (2001). Near-death experience in survivors of cardiac arrest: a prospective study in the Netherlands. *The Lancet*, 358(9298), 2039–2045. [https://doi.org/10.1016/s0140-6736\(01\)07100-8](https://doi.org/10.1016/s0140-6736(01)07100-8)
- van Os J, Hanssen M, Bijl RV, and Ravelli, A. (2000). Strauss (1969) revisited: A psychosis continuum in the general population? *Schizophrenia Research*, 45: 11-20.
- Verdoux, H., & Van Os, J. (2002). Psychotic symptoms in non-clinical populations and the continuum of psychosis. *Schizophrenia Research*, 54: 59-65.
- Wackermann, J., Pütz, P., & Allefeld C. (2008). Ganzfeld-induced hallucinatory experience, its phenomenology and cerebral electrophysiology. *Cortex* 44, 1364–1378. 10.1016/j.cortex.2007.05.003
- Wittmann, M. (2015). Modulations of the experience of self and time. *Consciousness and Cognition*, 38, 172–181. <https://doi.org/10.1016/j.concog.2015.06.008>
- Yaden, D. B., Haidt, J., Hood, R. W., Jr., Vago, D. R., & Newberg, A. B. (2017). The Varieties of Self-Transcendent Experience. *Review of General Psychology*, 21(2), 143–160. <https://doi.org/10.1037/gpr0000102>
- Zingrone, N. L. (2009). Pleasurable Western adult near-death experiences: features, circumstances, and incidence. In Holden, J. M., Greyson, B., James, D., (Edit.). *The*

Handbook of Near-Death Experiences: Thirty Years of Investigation (pp. 17–40).
SantaBarbara, CA: Praeger/ABC-CLIO.

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

8. **3. While watching a movie, a TV show, or a play, I may become so involved that I may forget about myself and my surroundings and experience the story as if it were real and as if I were taking part in it.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

9. **4. If I stare at a picture and then look away from it, I can sometimes "see" an image of the picture almost as if I were still looking at it.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

10. **5. Sometimes I feel as if my mind could envelop the whole world.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

11. **6. I like to watch cloud shapes change in the sky.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

12. **7. If I wish I can imagine (or daydream) some things so vividly that they hold my attention as a good movie or story does.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

13. **8. I think I really know what some people mean when they talk about mystical experiences.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

14. 9. I sometimes "step outside" my usual self and experience an entirely different state of being.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

15. **10. Textures -- such as wool, sand, wood -- sometimes remind me of colors or music.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

16. 11. Sometimes I experience things as if they were doubly real.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

17. **12. When I listen to music I can get so caught up in it that I don't notice anything else.**

Mark only one oval.

[illegible]

18. **13. If I wish I can imagine that my body is so heavy that I could not move it if I wanted to.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

19. 14. I can often somehow sense the presence of another person before I actually see or hear her/him.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

20. **15. The crackle and flames of a wood fire stimulate my imagination.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

21. **16. It is sometimes possible for me to be completely immersed in nature or in art and to feel as if my whole state of consciousness has somehow been temporarily altered.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

22. **17. Different colors have distinctive and special meanings for me.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

23. **18. I am able to wander off into my thoughts while doing a routine task and actually forget that I am doing the task, and then find a few minutes later that I have completed it.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

24. **19. I can sometimes recollect certain past experiences in my life with such clarity and vividness that it is like living them again or almost so.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

25. **20. Things that might seem meaningless to others often make sense to me.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

26. **21. While acting in a play I think I could really feel the emotions of the character and "become" her/him for the time being, forgetting both myself and the audience.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

- 27. 22. My thoughts often don't occur as words but as visual images.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

28. **23. I often take delight in small things (like the five-pointed star shape that appears when you cut an apple across the core or the colors in soap bubbles).**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

29. **24. When listening to organ music or other powerful music I sometimes feel as if I am being lifted into the air.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

- 30. 25. Sometimes I can change noise into music by the way I listen to it.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

- 31. 26. Some of my most vivid memories are called up by scents and smells.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

32. 27. Some music reminds me of pictures or changing color patterns.

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

33. 28. I often know what someone is going to say before he or she says it.

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

34. **29. I often have "physical memories"; for example, after I have been swimming I may still feel as if I am in the water.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

35. **30. The sound of a voice can be so fascinating to me that I can just go on listening to it.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

36. 31. At times I somehow feel the presence of someone who is not physically there.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

37. **32. Sometimes thoughts and images come to me without the slightest effort on my part.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

38. **33. I find that different odors have different colors.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

39. **34. I can be deeply moved by a sunset.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

40. What percentage of your time do you see -with eyes open- your visual field full of small light spots or filled with light spots?

Mark only one oval.

- ☐ 0% - Never
- ☐ 10%
- ☐ 20%
- ☐ 30%
- ☐ 40%
- ☐ 50%
- ☐ 60%
- ☐ 70%
- ☐ 80%
- ☐ 90%
- ☐ 100% - Very frequently

41. 1) Do these spots bother you?

Mark only one oval.

[illegible]

42. 2) Do these spots fascinate you?

Mark only one oval.

[illegible]

43. Check the option that best describes your alcohol consumption.

Mark only one oval.

- ☐ I do not drink alcohol
- ☐ Less than 3 drinks per week
- ☐ Between 3 and 10 drinks per week (for male); Between 3 and 7 drinks per week (if female)
- ☐ Between 11 and 21 drinks per week (if male); Between 8 and 14 drinks per week (if female)
- ☐ Over 21 drinks per week (if male); Over 14 drinks per week (if female)

44. Check the option that best describes your smoking habits.

Mark only one oval.

- ☐ I do not smoke
- ☐ I smoke up to 10 cigarettes per day
- ☐ I smoke more than 10 cigarettes per day

45. During the past year have you used some other psychoactive substance?

Mark only one oval.

- ☐ Yes
- ☐ No *After the last question in this section, skip to question 52.*

46. If yes, which one(s)?

Tick all that apply.

- ☐ Cannabis or synthetic cannabinoids
- ☐ Cocaine or other stimulants
- ☐ MDMA / ecstasy
- ☐ Heroin or other opiates
- ☐ "Acids", ayahuasca or other psychedelics ("hallucinogens")

47. Do you take antidepressants?

Mark only one oval.

- ☐ Yes
- ☐ Not

48. Do you have health problems?

Mark only one oval.

- ☐ Yes
- ☐ No

49. Which one(s)?

50. **Do you take other medicines (including nutritional supplements)?**

Mark only one oval.

☐ Yes

☐ No

51. **If yes, what one(s)?**

52. **Do you have a regular sexual partner?**

Mark only one oval.

☐ Yes

☐ No

53. **Do you live together?**

Mark only one oval.

☐ Yes

☐ No

54. **How long is your relationship?**

55. **Which of the following best describes your sexuality?**

Mark only one oval.

☐ Only with the opposite gender

☐ Mainly with the opposite gender

☐ Approximately as much with the opposite gender as with the same gender

☐ Mostly with the same gender

☐ Only with the same gender

During the last month

56. **Did you have any sexual intercourse?**

Mark only one oval.

☐ Yes

☐ No *Skip to question 80.*

Over the past 4 weeks

Choose the most appropriate answer about your sexual intercourse in the last four weeks.

57. 1. How often did you feel sexual desire or interest?

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

58. 2. How would you rate your level (degree) of sexual desire or interest?

Mark only one oval.

- ☐ Very low or none at all
- ☐ Low
- ☐ Moderate
- ☐ High
- ☐ Very high

59. 3. How often did you feel sexually aroused (“turned on”) during sexual activity or intercourse?

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

60. 4. How would you rate your level of sexual arousal (“turn on”) during sexual activity or intercourse?

Mark only one oval.

- ☐ Very low or none at all
- ☐ Low
- ☐ Moderate
- ☐ High
- ☐ Very high

61. **5. How confident were you about becoming sexually aroused during sexual activity or intercourse?**

Mark only one oval.

- ☐ Very low or no confidence
- ☐ Low confidence
- ☐ Moderate confidence
- ☐ High confidence
- ☐ Very high confidence

62. **6. How often have you been satisfied with your arousal (excitement) during sexual activity or intercourse?**

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

63. **7. How often did you become lubricated ("wet") during sexual activity or intercourse?**

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

64. **8. How difficult was it to become lubricated ("wet") during sexual activity or intercourse?**

Mark only one oval.

- ☐ Not difficult
- ☐ Slightly difficult
- ☐ Difficult
- ☐ Very difficult
- ☐ Extremely difficult or impossible

65. **9. How often did you maintain your lubrication (“wetness”) until completion of sexual activity or intercourse?**

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

66. **10. How difficult was it to maintain your lubrication (“wetness”) until completion of sexual activity or intercourse?**

Mark only one oval.

- ☐ Not difficult
- ☐ Slightly difficult
- ☐ Difficult
- ☐ Very difficult
- ☐ Extremely difficult or impossible

67. **11. When you had sexual stimulation or intercourse, how often did you reach orgasm (climax)?**

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

68. **12. When you had sexual stimulation or intercourse, how difficult was it for you to reach orgasm (climax)?**

Mark only one oval.

- ☐ Not difficult
- ☐ Slightly difficult
- ☐ Difficult
- ☐ Very difficult
- ☐ Extremely difficult or impossible

69. **13. How satisfied were you with your ability to reach orgasm (climax) during sexual activity or intercourse?**

Mark only one oval.

- ☐ Very dissatisfied
☐ Moderately dissatisfied
☐ Igualmente satisfeita e insatisfeita
☐ Moderately satisfied
☐ Very satisfied

70. **14. How satisfied have you been with the amount of emotional closeness during sexual activity between you and your partner?**

Mark only one oval.

- ☐ Very dissatisfied
☐ Moderately dissatisfied
☐ About equally satisfied and dissatisfied
☐ Moderately satisfied
☐ Very satisfied

71. **15. How satisfied have you been with your sexual relationship with your partner?**

Mark only one oval.

- ☐ Very dissatisfied
☐ Moderately dissatisfied
☐ About equally satisfied and dissatisfied
☐ Moderately satisfied
☐ Very satisfied

72. **16. What is your level of satisfaction with your sexual life in general?**

Mark only one oval.

- ☐ Very dissatisfied
☐ Moderately dissatisfied
☐ About equally satisfied and dissatisfied
☐ Moderately satisfied
☐ Very satisfied

73. **Did you have sexual activity with vaginal penetration (penis into vagina)?**

Mark only one oval.

- ☐ Yes *Skip to question 74.*
☐ No *Skip to question 80.*

During the last month

Choose the most appropriate answer about your sexual intercourse in the last four weeks.

74. **17. How often did you experience discomfort or pain during vaginal penetration?**

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

75. **18. How often did you experience discomfort or pain following vaginal penetration?**

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

76. **19. How would you rate your level (degree) of discomfort or pain during or following vaginal penetration?**

Mark only one oval.

- ☐ Very low or none at all
- ☐ Low
- ☐ Moderate
- ☐ High
- ☐ Very high

77. **20. During vaginal penetration, how often did you reach orgasm (climax) without direct stimulation of the clitoris?**

Mark only one oval.

- ☐ Almost never or never
- ☐ A few times (less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (more than half the time)
- ☐ Almost always or always

78. **21. During vaginal penetration, how difficult was it to reach orgasm (climax) without direct stimulation of the clitoris?**

Mark only one oval.

- ☐ Extremely difficult or impossible
- ☐ Very difficult
- ☐ Difficult
- ☐ Slightly difficult
- ☐ Not difficult

79. **22. How satisfied were you with your ability to reach orgasm (climax) during vaginal penetration without direct stimulation of the clitoris?**

Mark only one oval.

- ☐ Very dissatisfied
- ☐ Moderately dissatisfied
- ☐ About equally satisfied and dissatisfied
- ☐ Moderately satisfied
- ☐ Very satisfied

Below is a list of feelings and problems that men and women sometimes have concerning their sexuality. Please check the box that best describes how often that problem has bothered you or caused distress over the last 4 weeks.

80. **01. Distressed with your sexual life?**

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

81. **02. Unhappy about your sexual relationship?**

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

82. 03. Guilty about your sexual difficulties?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

83. 04. Frustrated by your sexual problems?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

84. 05. Stressed about sex?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

85. 06. Inferior because of sexual problems?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

86. 07. Worried about sex?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

87. 08. Sexually inadequate?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

88. 09. Regrets about your sexuality?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

89. 10. Embarrassed about sexual problems?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

90. 11. Dissatisfied with your sexual life?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

91. 12. Angry about your sexual life?

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

92. **13. Bothered by low sexual desire?**

Mark only one oval.

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

Skip to question 94.

During the last month

93. **Did you have any sexual intercourse in the last month?**

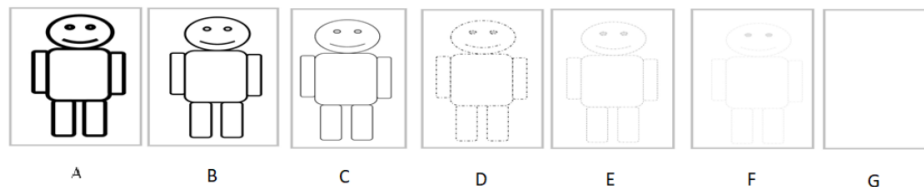
Mark only one oval.

- ☐ Yes
- ☐ No

During the last sexual intercourse

Reply to the following questions keeping in mind your last sexual intercourse. If you never had a sexual intercourse, skip this section. Do not consider masturbation or virtual sex as a sexual intercourse, unless masturbation occurred in a context of face-to-face sexual intercourse.

94. **1. How intensely did you feel your own self? (based on the image)**



Mark only one oval.

- ☐ A
- ☐ B
- ☐ C
- ☐ D
- ☐ E
- ☐ F
- ☐ G

95. **2. How intensely did you feel the surrounding space? (based on the image)**



Mark only one oval.

	1	2	3	4	5	6	7	
Extremely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not at all

96. **3. Indicate the value in the scale from 0 to 100 that best describes how intensely you felt the presence of time. (0: Not at all - 100: Extremely)**



97. **4. Indicate the value in the scale from 0 to 100 that best describes how fast you felt the time pass. (0: Extremely slow - 100: Extremely fast)**



98. **5. How satisfied have you been with your last sexual intercourse?**

Mark only one oval.

	1	2	3	4	5	
Not at all satisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremely satisfied

99. **6. How much sexual desire did you feel in your last sexual intercourse?**

Mark only one oval.

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremely

100. **7. How aroused were you?**

Mark only one oval.

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremely

101. **8. During your last sexual intercourse, did you have the feeling of orgasm through vaginal intercourse (penis into vagina)?**

Mark only one oval.

- ☐ Yes
☐ No

102. **9. The orgasm in the vaginal intercourse was:**

Mark only one oval.

- ☐ With direct stimulation of the clitoris
☐ Without direct stimulation of the clitoris
☐ Orgasms in both ways

103. **10. During your last sexual intercourse, did you have the feeling of orgasm through non-vaginal intercourse (oral sex, anal sex, masturbation)?**

Mark only one oval.

- ☐ Yes
☐ No

104. **11. During your last sexual intercourse, were you under the influence of any psychoactive substance (including alcohol and nicotine)?**

Mark only one oval.

- ☐ Yes
☐ No

105. **If yes, which one or which ones?**

Powered by

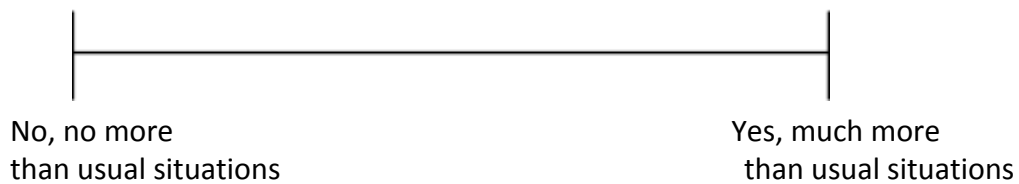
 Google Forms

During the last sexual intercourse

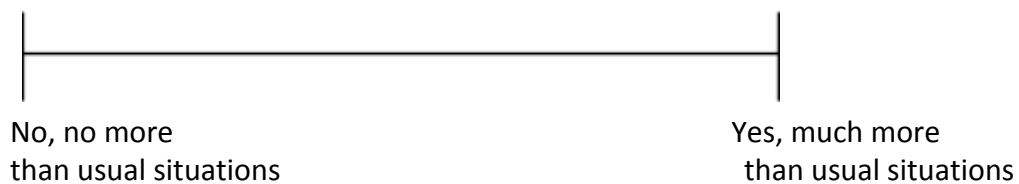
Follows a series of phrases that describe states that can be triggered by substance use, hypnosis, meditation, or some life events. Sometimes they also occur during sexual activity. Indicate to what extent you felt that these states were occurring during your last sexual intercourse or shortly after, compared to your usual day-to-day awareness (in non-sexual contexts). Indicate the change you felt with a number between 1 and 100.

NOTE that your usual state of consciousness corresponds to the left end of the line.

1) **Everything seemed to unify into an oneness.**



2) **It seemed to me that my environment and I were one.**



3) **I experienced a touch of eternity.**



4) **Conflicts and contradictions seemed to dissolve.**



5) **I experienced past, present and future as an oneness.**


No, no more than usual situations
Yes, much more than usual situations

6) **I had the feeling of being connected to a superior power.**


No, no more than usual situations
Yes, much more than usual situations

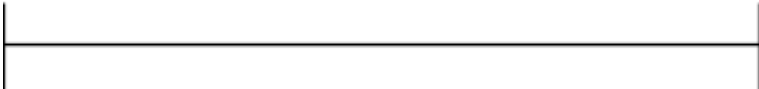
7) **I experienced a kind of awe (mix of respect and wonder inspired by something greater).**


No, no more than usual situations
Yes, much more than usual situations

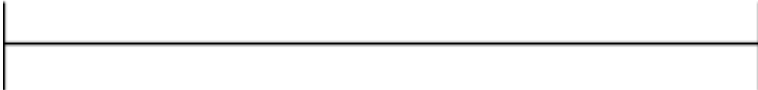
8) **My experience had religious aspects.**


No, no more than usual situations
Yes, much more than usual situations

9) **I enjoyed boundless pleasure.**


No, no more than usual situations
Yes, much more than usual situations

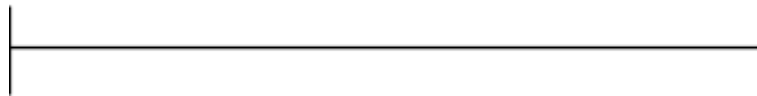
10) **I experienced a profound peace in myself.**



No, no more
than usual situations

Yes, much more
than usual situations

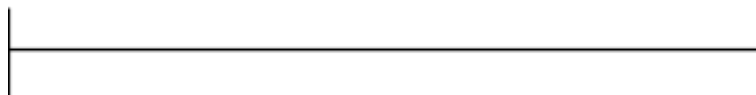
11) **I experienced an all-embracing love.**



No, no more
than usual situations

Yes, much more
than usual situations

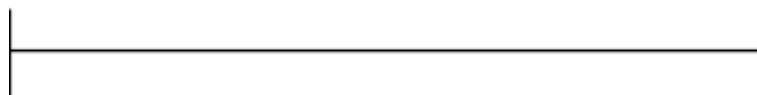
12) **I felt very profound.**



No, no more
than usual situations

Yes, much more
than usual situations

13) **I gained clarity into connections that puzzled me before.**



No, no more
than usual situations

Yes, much more
than usual situations

14) **I had very original thoughts.**



No, no more
than usual situations

Yes, much more
than usual situations

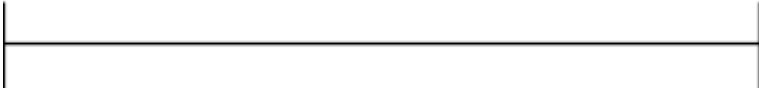
15) **It seemed to me as though I did not have a body anymore.**


No, no more
than usual situations
Yes, much more
than usual situations

16) I had the feeling of being outside of my body.


No, no more
than usual situations
Yes, much more
than usual situations

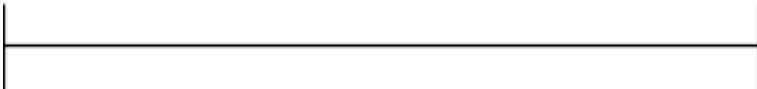
17) I felt as though I was floating.


No, no more
than usual situations
Yes, much more
than usual situations

18) I felt like a marionette..


No, no more
than usual situations
Yes, much more
than usual situations

19) I had difficulty making even the smallest decision.


No, no more
than usual situations
Yes, much more
than usual situations

20) I had difficulty in distinguishing important from unimportant things.


No, no more
than usual situations
Yes, much more
than usual situations

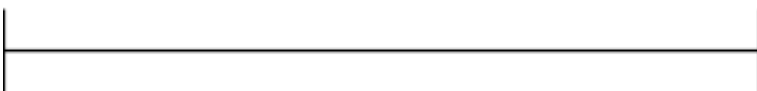
21) I felt as though I were paralyzed.


No, no more
than usual situations
Yes, much more
than usual situations

22) I felt isolated from everything and everyone.


No, no more
than usual situations
Yes, much more
than usual situations

23) I was not able to complete a thought, my thought repeatedly became disconnected.


No, no more
than usual situations
Yes, much more
than usual situations

24) I had the feeling that I no longer had a will of my own.


No, no more
than usual situations
Yes, much more
than usual situations

25) I was afraid that the state I was in would last forever.



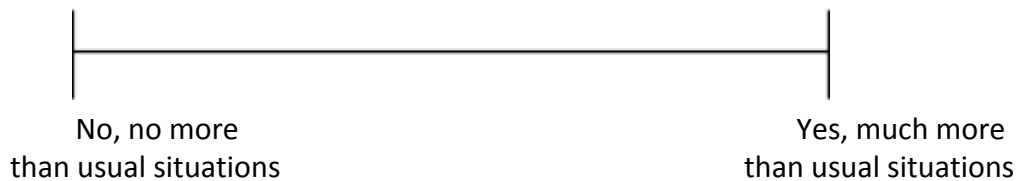
26) I was afraid without being able to say exactly why.



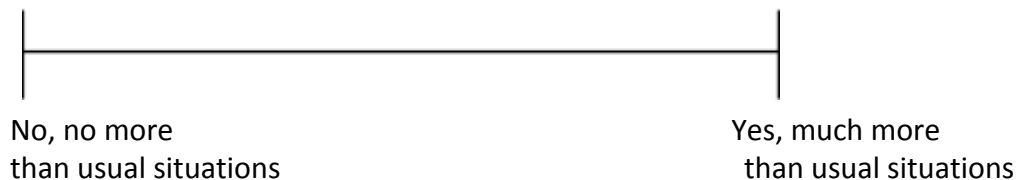
27) I experienced everything terrifyingly distorted.



28) I experienced my surroundings as strange and weird.



29) I felt threatened.



30) I had the feeling that something horrible would happen.



No, no more
than usual situations

Yes, much more
than usual situations

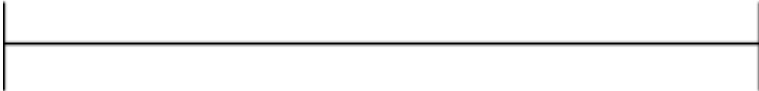
31) I saw scenes rolling by in total darkness or with my eyes closed.



No, no more
than usual situations

Yes, much more
than usual situations

32) I could see pictures from my past or fantasy extremely clearly.



No, no more
than usual situations

Yes, much more
than usual situations

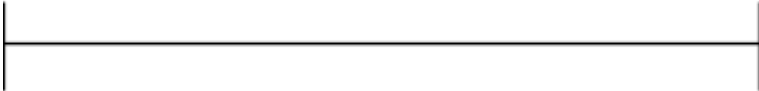
33) My imagination was extremely vivid.



No, no more
than usual situations

Yes, much more
than usual situations

34) I saw regular patterns in complete darkness or with closed eyes.



No, no more
than usual situations

Yes, much more
than usual situations

35) I saw colors before me in total darkness or with closed eyes.



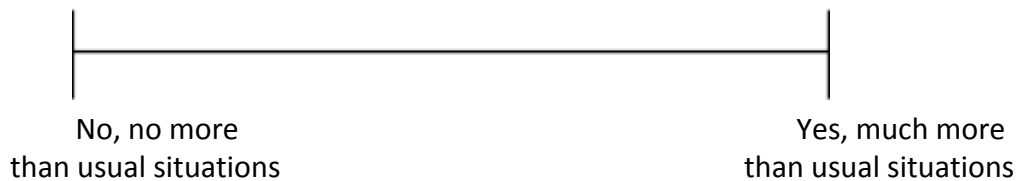
36) I saw lights or flashes of light in total darkness or with closed eyes.



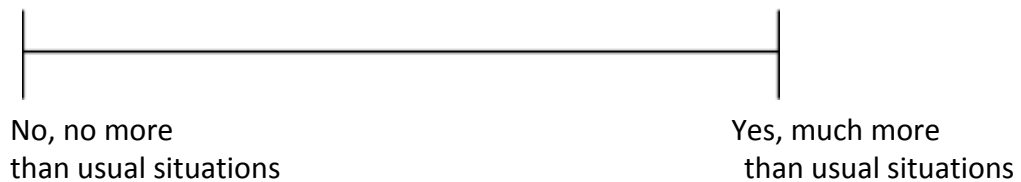
37) Noises seemed to influence what I saw.



38) The shapes of things seemed to change by sounds and noises.



39) The colors of things seemed to be changed by sounds and noises.



40) Everyday things gained a special meaning.


No, no more
than usual situations
Yes, much more
than usual situations

41) Things around me had a new and strange meaning for me.


No, no more
than usual situations
Yes, much more
than usual situations

42) Objects around me engaged me emotionally much more than usual.


No, no more
than usual situations
Yes, much more
than usual situations

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

8. 3. While watching a movie, a TV show, or a play, I may become so involved that I may forget about myself and my surroundings and experience the story as if it were real and as if I were taking part in it.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

9. 4. If I stare at a picture and then look away from it, I can sometimes "see" an image of the picture almost as if I were still looking at it.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

- 10. 5. Sometimes I feel as if my mind could envelop the whole world.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

- 11. 6. I like to watch cloud shapes change in the sky.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

12. 7. If I wish I can imagine (or daydream) some things so vividly that they hold my attention as a good movie or story does.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

13. **I think I really know what some people mean when they talk about mystical experiences.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

14. 9. I sometimes "step outside" my usual self and experience an entirely different state of being.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

15. **10. Textures -- such as wool, sand, wood -- sometimes remind me of colors or music.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

16. 11. Sometimes I experience things as if they were doubly real.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

17. **12. When I listen to music I can get so caught up in it that I don't notice anything else.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

18. **13. If I wish I can imagine that my body is so heavy that I could not move it if I wanted to.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

19. 14. I can often somehow sense the presence of another person before I actually see or hear her/him.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

20. 15. The crackle and flames of a wood fire stimulate my imagination.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

21. 16. It is sometimes possible for me to be completely immersed in nature or in art and to feel as if my whole state of consciousness has somehow been temporarily altered.

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

- 22. 17. Different colors have distinctive and special meanings for me.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

23. 18. I am able to wander off into my thoughts while doing a routine task and actually forget that I am doing the task, and then find a few minutes later that I have completed it.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

24. **19. I can sometimes recollect certain past experiences in my life with such clarity and vividness that it is like living them again or almost so.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

- 25. 20. Things that might seem meaningless to others often make sense to me.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

26. **21. While acting in a play I think I could really feel the emotions of the character and "become" her/him for the time being, forgetting both myself and the audience.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

- 27. 22. My thoughts often don't occur as words but as visual images.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

28. **23. I often take delight in small things (like the five-pointed star shape that appears when you cut an apple across the core or the colors in soap bubbles).**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

29. **24. When listening to organ music or other powerful music I sometimes feel as if I am being lifted into the air.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

- 30. 25. Sometimes I can change noise into music by the way I listen to it.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

- 31. 26. Some of my most vivid memories are called up by scents and smells.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

32. 27. Some music reminds me of pictures or changing color patterns.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

33. 28. I often know what someone is going to say before he or she says it.

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

34. **29. I often have "physical memories"; for example, after I have been swimming I may still feel as if I am in the water.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

35. **30. The sound of a voice can be so fascinating to me that I can just go on listening to it.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

36. 31. At times I somehow feel the presence of someone who is not physically there.

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

37. **32. Sometimes thoughts and images come to me without the slightest effort on my part.**

Mark only one oval.

	1	2	3	4	5	
Totally disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Totally agree

38. **33. I find that different odors have different colors.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

39. **34. I can be deeply moved by a sunset.**

Mark only one oval.

1 2 3 4 5

Totally disagree ☐ ☐ ☐ ☐ ☐ Totally agree

40. What percentage of your time do you see -with eyes open- your visual field full of small light spots or filled with light spots?

Mark only one oval.

- ☐ 0% - Never
- ☐ 10%
- ☐ 20%
- ☐ 30%
- ☐ 40%
- ☐ 50%
- ☐ 60%
- ☐ 70%
- ☐ 80%
- ☐ 90%
- ☐ 100% - Very frequently

41. 1) Do these spots bother you?

Mark only one oval.

[illegible]

42. 2) Do these spots fascinate you?

Mark only one oval.

[illegible]

43. Check the option that best describes your alcohol consumption.

Mark only one oval.

- ☐ I do not drink alcohol
- ☐ Less than 3 drinks per week
- ☐ Between 3 and 10 drinks per week (for male); Between 3 and 7 drinks per week (if female)
- ☐ Between 11 and 21 drinks per week (if male); Between 8 and 14 drinks per week (if female)
- ☐ Over 21 drinks per week (if male); Over 14 drinks per week (if female)

44. Check the option that best describes your smoking habits.

Mark only one oval.

- ☐ I do not smoke
- ☐ I smoke up to 10 cigarettes per day
- ☐ I smoke more than 10 cigarettes per day

45. During the past year have you used some other psychoactive substance?

Mark only one oval.

- ☐ Yes
- ☐ No *After the last question in this section, skip to question 52.*

46. If yes, which one(s)?

Tick all that apply.

- ☐ Cannabis or synthetic cannabinoids
- ☐ Cocaine or other stimulants
- ☐ MDMA / ecstasy
- ☐ Heroin or other opiates
- ☐ "Acids", ayahuasca or other psychedelics ("hallucinogens")

47. Do you take antidepressants?

Mark only one oval.

- ☐ Yes
- ☐ Not

48. Do you have health problems?

Mark only one oval.

- ☐ Yes
- ☐ No

49. Which one(s)?

50. **Do you take other medicines (including nutritional supplements)?**

Mark only one oval.

☐ Yes

☐ No

51. **If yes, what one(s)?**

52. **Do you have a regular sexual partner?**

Mark only one oval.

☐ Yes

☐ No

53. **Do you live together?**

Mark only one oval.

☐ Yes

☐ No

54. **How long is your relationship?**

55. **Which of the following best describes your sexuality?**

Mark only one oval.

☐ Only with the opposite gender

☐ Mainly with the opposite gender

☐ Approximately as much with the opposite gender as with the same gender

☐ Mostly with the same gender

☐ Only with the same gender

During the last month

56. **Did you have any sexual intercourse?**

Mark only one oval.

☐ Yes

☐ No *Skip to question 77.*

During the last month

Choose the most appropriate answer about your sexual intercourse in the last four weeks.

57. 1. How often were you able to get an erection during sexual activity?

Mark only one oval.

- ☐ Almost never/never
- ☐ A few times (much less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (much more than half the time)
- ☐ Almost always/always

58. 2. When you had erections with sexual stimulation, how often were your erections hard enough for penetration?

Mark only one oval.

- ☐ Almost never/never
- ☐ A few times (much less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (much more than half the time)
- ☐ Almost always/always

59. 3. When you attempted sexual intercourse, how often were you able to penetrate (enter) your partner?

Mark only one oval.

- ☐ Almost never/never
- ☐ A few times (much less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (much more than half the time)
- ☐ Almost always/always

60. 4. During sexual intercourse, how often were you able to maintain your erection after you had penetrated (entered) your partner?

Mark only one oval.

- ☐ Almost never/never
- ☐ A few times (much less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (much more than half the time)
- ☐ Almost always/always

61. **5. During sexual intercourse, how difficult was it to maintain your erection to completion of intercourse?**

Mark only one oval.

- ☐ Extremely difficult
- ☐ Very difficult
- ☐ Difficult
- ☐ Slightly difficult
- ☐ Not difficult

62. **6. How many times have you attempted sexual intercourse?**

Mark only one oval.

- ☐ One to two attempts
- ☐ Three to four attempts
- ☐ Five to six attempts
- ☐ Seven to ten attempts
- ☐ Eleven+ attempts

63. **7. When you attempted sexual intercourse, how often was it satisfactory for you?**

Mark only one oval.

- ☐ Almost never/never
- ☐ A few times (much less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (much more than half the time)
- ☐ Almost always/always

64. **8. How much have you enjoyed sexual intercourse?**

Mark only one oval.

- ☐ No enjoyment
- ☐ Not very enjoyable
- ☐ Fairly enjoyable
- ☐ Highly enjoyable
- ☐ Very highly enjoyable

65. **9. When you had sexual stimulation or intercourse, how often did you ejaculate?**

Mark only one oval.

- ☐ Almost never/never
- ☐ A few times (much less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (much more than half the time)
- ☐ Almost always/always

66. **10. When you had sexual stimulation or intercourse, how often did you have the feeling of orgasm or climax?**

Mark only one oval.

- ☐ Almost never/never
- ☐ A few times (much less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (much more than half the time)
- ☐ Almost always/always

67. **11. How often have you felt sexual desire?**

Mark only one oval.

- ☐ Almost never/never
- ☐ A few times (much less than half the time)
- ☐ Sometimes (about half the time)
- ☐ Most times (much more than half the time)
- ☐ Almost always/always

68. **12. How would you rate your level of sexual desire?**

Mark only one oval.

- ☐ Very low/none at all
- ☐ Low
- ☐ Moderate
- ☐ High
- ☐ Very high

69. **13. How satisfied have you been with your overall sex life?**

Mark only one oval.

- ☐ Very dissatisfied
- ☐ Moderately dissatisfied
- ☐ About equally satisfied and dissatisfied
- ☐ Moderately satisfied
- ☐ Very satisfied

70. **14. How satisfied have you been with your sexual relationship with your partner?**

Mark only one oval.

- ☐ Very dissatisfied
- ☐ Moderately dissatisfied
- ☐ About equally satisfied and dissatisfied
- ☐ Moderately satisfied
- ☐ Very satisfied

71. **15. How do you rate your confidence that you could get and keep an erection?**

Mark only one oval.

- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High
- ☐ Very High

72. **01. How difficult is it for you to delay ejaculation?**

Mark only one oval.

- ☐ Not difficult at all
- ☐ Somewhat difficult
- ☐ Moderately difficult
- ☐ Very difficult
- ☐ Extremely difficult

73. **02. Do you ejaculate before you want to?**

Mark only one oval.

- ☐ Almost never or never 0%
- ☐ Less than half the time 25%
- ☐ About half the time 50%
- ☐ More than half the time 75%
- ☐ Almost always or always 100%

74. **03. Do you ejaculate with very little stimulation?**

Mark only one oval.

- ☐ Almost never or never 0%
- ☐ Less than half the time 25%
- ☐ About half the time 50%
- ☐ More than half the time 75%
- ☐ Almost always or always 100%

75. **04. Do you feel your sexual confidence is affected because of ejaculating before you want to?**

Mark only one oval.

- ☐ Not at all
- ☐ Slightly
- ☐ Moderately
- ☐ Very
- ☐ Extremely

76. **05. How concerned are you that your time to ejaculation leaves your partner sexually unfulfilled?**

Mark only one oval.

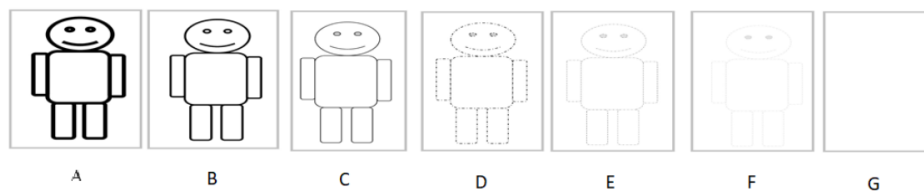
- ☐ Not at all
- ☐ Slightly
- ☐ Moderately
- ☐ Very
- ☐ Extremely

Skip to question 77.

During the last sexual intercourse

Reply to the following questions keeping in mind your last sexual intercourse. If you never had a sexual intercourse, skip this section. Do not consider masturbation or virtual sex as a sexual intercourse, unless masturbation occurred in a context of face-to-face sexual intercourse.

77. 1. How intensely did you feel your own self? (based on the image)



Mark only one oval.

- ☐ A
- ☐ B
- ☐ C
- ☐ D
- ☐ E
- ☐ F
- ☐ G

78. 2. How intensely did you feel the surrounding space? (based on the image)



Mark only one oval.

- [illegible]

79. **3. Indicate the value in the scale from 0 to 100 that best describes how intensely you felt the presence of time. (0: Not at all - 100: Extremely)**



80. **4. Indicate the value in the scale from 0 to 100 that best describes how fast you felt the time pass. (0: Extremely slow - 100: Extremely fast)**



81. **5. How satisfied have you been with your last sexual intercourse?**

Mark only one oval.

1 2 3 4 5

Not at all satisfied ☐ ☐ ☐ ☐ ☐ Extremely satisfied

82. **6. How much sexual desire did you feel in your last sexual intercourse?**

Mark only one oval.

1 2 3 4 5

Not at all ☐ ☐ ☐ ☐ ☐ Extremely

83. **7. How aroused were you?**

Mark only one oval.

1 2 3 4 5

Not at all ☐ ☐ ☐ ☐ ☐ Extremely

84. **8. During your last sexual intercourse, did you have the feeling of orgasm through vaginal intercourse (penis into vagina)?**

Mark only one oval.

☐ Yes
☐ No

85. **10. During your last sexual intercourse, did you have the feeling of orgasm through non-vaginal intercourse (oral sex, anal sex, masturbation)?**

Mark only one oval.

☐ Yes

☐ No

86. **11. During your last sexual intercourse, were you under the influence of any psychoactive substance (including alcohol and nicotine)?**

Mark only one oval.

☐ Yes

☐ No

87. **If yes, which one or which ones?**

Powered by

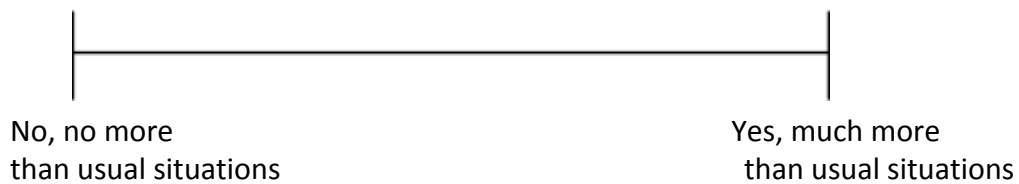


During the last sexual intercourse

Follows a series of phrases that describe states that can be triggered by substance use, hypnosis, meditation, or some life events. Sometimes they also occur during sexual activity. Indicate to what extent you felt that these states were occurring during your last sexual intercourse or shortly after, compared to your usual day-to-day awareness (in non-sexual contexts). Indicate the change you felt with a number between 1 and 100.

NOTE that your usual state of consciousness corresponds to the left end of the line.

1) **Everything seemed to unify into an oneness.**



2) **It seemed to me that my environment and I were one.**



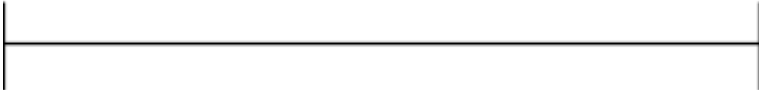
3) **I experienced a touch of eternity.**



4) **Conflicts and contradictions seemed to dissolve.**



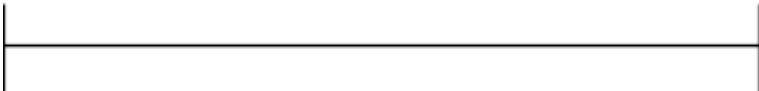
5) **I experienced past, present and future as an oneness.**


No, no more
than usual
situations
Yes, much more
than usual situations

6) I had the feeling of being connected to a superior power.


No, no more
than usual situations
Yes, much more
than usual situations

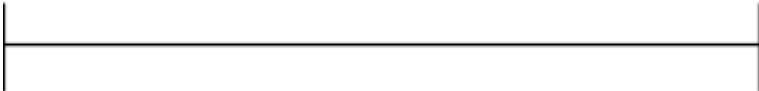
7) I experienced a kind of awe (mix of respect and wonder inspired by something greater).


No, no more
than usual situations
Yes, much more
than usual situations

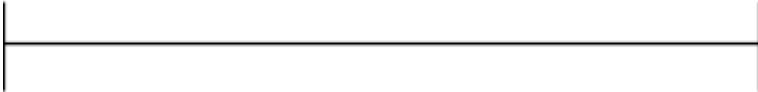
8) My experience had religious aspects.


No, no more
than usual situations
Yes, much more
than usual situations

9) I enjoyed boundless pleasure.


No, no more
than usual situations
Yes, much more
than usual situations

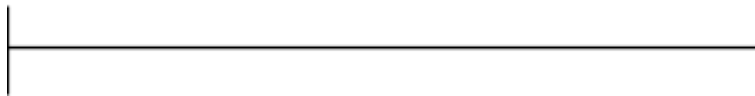
10) I experienced a profound peace in myself.



No, no more
than usual situations

Yes, much more
than usual situations

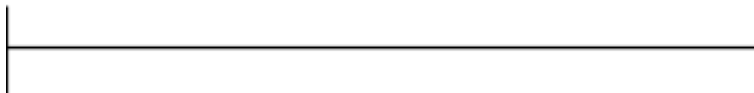
11) **I experienced an all-embracing love.**



No, no more
than usual situations

Yes, much more
than usual situations

12) **I felt very profound.**



No, no more
than usual situations

Yes, much more
than usual situations

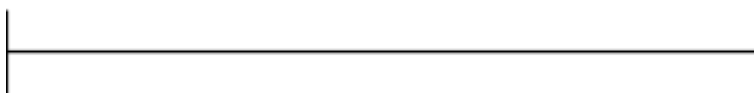
13) **I gained clarity into connections that puzzled me before.**



No, no more
than usual situations

Yes, much more
than usual situations

14) **I had very original thoughts.**



No, no more
than usual situations

Yes, much more
than usual situations

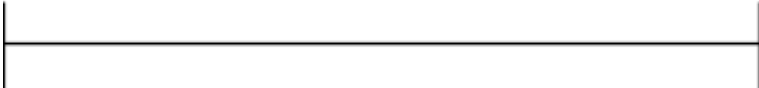
15) **It seemed to me as though I did not have a body anymore.**


No, no more
than usual situations
Yes, much more
than usual situations

16) I had the feeling of being outside of my body.


No, no more
than usual situations
Yes, much more
than usual situations

17) I felt as though I was floating.


No, no more
than usual situations
Yes, much more
than usual situations

18) I felt like a marionette..


No, no more
than usual situations
Yes, much more
than usual situations

19) I had difficulty making even the smallest decision.


No, no more
than usual situations
Yes, much more
than usual situations

20) I had difficulty in distinguishing important from unimportant things.


No, no more
than usual situations
Yes, much more
than usual situations

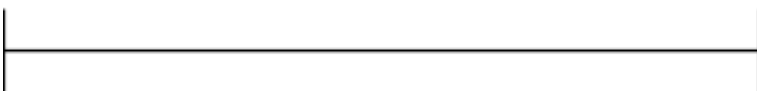
21) I felt as though I were paralyzed.


No, no more
than usual situations
Yes, much more
than usual situations

22) I felt isolated from everything and everyone.


No, no more
than usual situations
Yes, much more
than usual situations

23) I was not able to complete a thought, my thought repeatedly became disconnected.


No, no more
than usual situations
Yes, much more
than usual situations

24) I had the feeling that I no longer had a will of my own.


No, no more
than usual situations
Yes, much more
than usual situations

25) I was afraid that the state I was in would last forever.



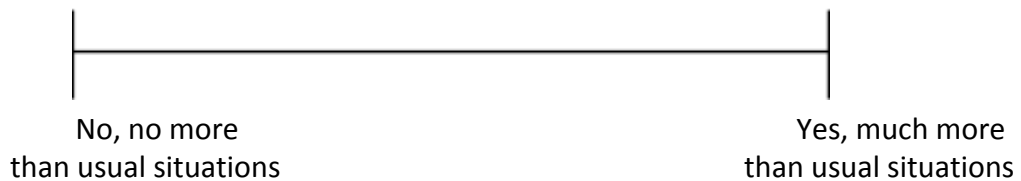
26) I was afraid without being able to say exactly why.



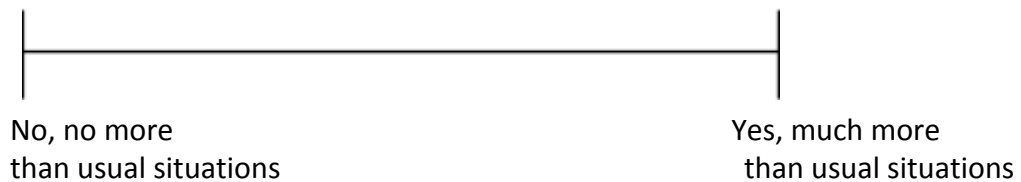
27) I experienced everything terrifyingly distorted.



28) I experienced my surroundings as strange and weird.



29) I felt threatened.



30) I had the feeling that something horrible would happen.

No, no more
than usual situations

Yes, much more
than usual situations

31) I saw scenes rolling by in total darkness or with my eyes closed.

No, no more
than usual situations

Yes, much more
than usual situations

32) I could see pictures from my past or fantasy extremely clearly.

No, no more
than usual situations

Yes, much more
than usual situations

33) My imagination was extremely vivid.

No, no more
than usual situations

Yes, much more
than usual situations

34) I saw regular patterns in complete darkness or with closed eyes.

No, no more
than usual situations

Yes, much more
than usual situations

35) I saw colors before me in total darkness or with closed eyes.



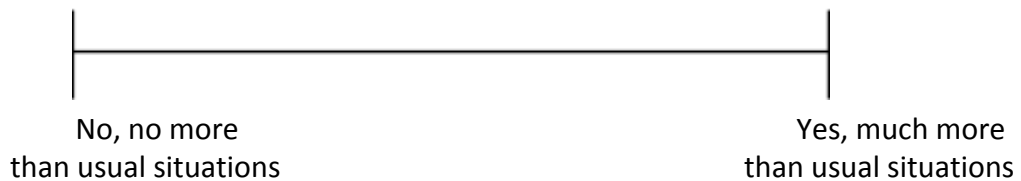
36) I saw lights or flashes of light in total darkness or with closed eyes.



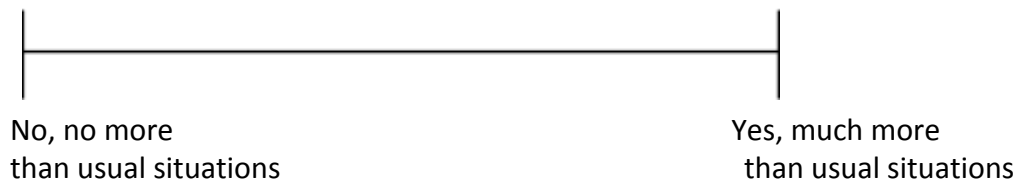
37) Noises seemed to influence what I saw.



38) The shapes of things seemed to change by sounds and noises.



39) The colors of things seemed to be changed by sounds and noises.



40) Everyday things gained a special meaning.


No, no more
than usual situations
Yes, much more
than usual situations

41) Things around me had a new and strange meaning for me.


No, no more
than usual situations
Yes, much more
than usual situations

42) Objects around me engaged me emotionally much more than usual.


No, no more
than usual situations
Yes, much more
than usual situations

Annex IV – Online Questionnaire (female version in Portuguese)

Este estudo enquadra-se num projeto de investigação levado a cabo no ISPA - Instituto Universitário e tem como principal objetivo compreender de que modo a personalidade se relaciona com a sexualidade.

As suas respostas serão anónimas e confidenciais. É importante que responda a todas as perguntas com honestidade. Todavia, se não se sentir confortável a responder a alguma, sinta-se à vontade para não responder a essa questão em particular.

Este questionário demorará cerca de 15 minutos.

Caso surja alguma dúvida ou questão por favor contacte o professor orientador Rui Miguel Costa para rcosta@ispa.pt

1. Idade

2. Profissão

3. Habilitações literárias

4. Nacionalidade

5. Estado civil

6. 1. Às vezes sinto as coisas da mesma maneira como quando era criança

Mark only one oval.

1 2 3 4 5

Discordo Totalmente

☐☐☐☐☐

Concordo Totalmente

7. **2. Posso ficar comovida quando ouço um discurso muito bonito, uma poesia ou uma canção de que gosto**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

8. **3. Quando estou a ver um filme ou um programa de televisão, posso ficar tão envolvida que esqueço onde estou e vivo a história como se fosse verdadeira e eu estivesse a tomar parte dela**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

9. **4. Quando olho para uma fotografia ou pintura e depois desvio o olhar, às vezes posso “ver” a imagem da fotografia/pintura, quase como se estivesse a olhar para ela**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

10. **5. Às vezes sinto que é como se a minha mente envolvesse o mundo inteiro**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

11. **6. Eu gosto de observar as nuvens a mudarem de forma no céu**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

12. **7. Se eu quiser, posso imaginar as coisas com tanta clareza, que é como se estivesse a ver um filme**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

13. **8. Eu penso que sei o que algumas pessoas querem dizer quando falam acerca de experiências sobrenaturais**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

14. **9. Eu por vezes saio do meu eu normal e entro num estado de ser completamente diferente**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

15. **10. Tocar em coisas como lã, areia ou madeira, às vezes faz-me lembrar certas cores ou músicas**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

16. **11. Às vezes sinto as coisas à minha volta com muita intensidade, como se fossem duplamente reais**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

17. **12. Quando ouço música posso ficar tão envolvido que não noto nada à minha volta**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

18. **13. Se eu quisesse, posso imaginar que o meu corpo é tão pesado que não o poderia mexer mesmo que quisesse**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

19. **14. Frequentemente, posso sentir a presença de uma pessoa antes de a ver ou ouvir**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

20. **15. O estalar do lume e as chamas de uma lareira acesa estimulam a minha imaginação**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

21. **16. Às vezes é possível eu estar completamente imerso na natureza ou na arte e sinto como se todo o meu estado de consciência tivesse sido temporariamente alterado**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

22. **17. Cores diferentes têm significados particulares e especiais para mim**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

23. **18. Consigo perder-me nos meus pensamentos enquanto faço uma tarefa usual, ao ponto de esquecer o que estou a fazer e daí a minutos chegar à conclusão de que já acabei a tarefa**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

24. **19. Às vezes posso lembrar-me de coisas do meu passado de forma tão clara e vívida que é quase como se estivesse a vivê-las de novo**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

25. **20. Coisas que não fazem sentido para os outros, muitas vezes fazem sentido para mim**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

26. **21. Se eu estivesse a representar uma peça de teatro, eu acho que conseguiria sentir as emoções do personagem e tornar-me tal como ele, não pensando em mim próprio ou na audiência**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

27. **22. Os meus pensamento vêm-me à cabeça como imagens visuais e não como palavras**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

28. **23. Frequentemente tenho prazer em coisas pequenas, como ver uma folha que cai ou cheirar uma flor**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

29. **24. Quando ouço música forte, como de banda ou orquestra, às vezes sinto como se estivesse a ser elevado no ar**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

30. **25. Às vezes posso fazer com que o barulho pareça música pelo modo como o ouço**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

31. **26. Algumas das minhas recordações mais vivas vêm através de certos cheiros**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

32. **27. Algumas peças de música fazem-me pensar em fotografias ou pinturas com muitas cores**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

33. **28. Frequentemente eu sei o que alguém vai dizer antes de ele(a) falar**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

34. **29. Muitas vezes tenho “memórias físicas”, por exemplo, depois de ter estado a nadar, posso sentir-me como se ainda estivesse na água**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

35. **30. O som de uma voz pode ser tão fascinante para mim que eu não paro de a ouvir**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

36. **31. Às vezes eu sinto a presença de alguém que não está fisicamente presente**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

37. 32. Às vezes pensamentos e imagens vêm-me à cabeça sem qualquer esforço da minha parte

Mark only one oval.

1 2 3 4 5

Discordo Totalmente ☐ ☐ ☐ ☐ ☐ Concordo Totalmente

38. 33. Eu acho que cheiros diferentes têm cores diferentes

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

39. **34. Um pôr-do-sol pode comover-me profundamente**

Mark only one oval.

[illegible]

40. Qual a porcentagem de tempo em que, de olho abertos, vê o seu campo visual cheio de pequenos pontos de luz ou cheio de pontos de luz

Mark only one oval.

- ☐ 0% - Nunca
- ☐ 10%
- ☐ 20%
- ☐ 30%
- ☐ 40%
- ☐ 50%
- ☐ 60%
- ☐ 70%
- ☐ 80%
- ☐ 90%
- ☐ 100% - Muito frequentemente

41. 1) Estes pontos de luz incomodam-na?

Mark only one oval.

[illegible]

42. 2) Estes pontos de luz fascinam-na?

Mark only one oval.

	1	2	3	4	5	6	7	
Absolutamente nada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremamente

43. Assinale a opção que melhor descreve o seu consumo de álcool.

Mark only one oval.

- ☐ Não bebo
- ☐ Menos de 3 bebidas por semana
- ☐ Entre 3 e 10 bebidas por semana (se for homem); Entre 3 e 7 bebidas por semana (se for mulher)
- ☐ Entre 11 e 21 bebidas por semana (se for homem); Entre 8 e 14 bebidas por semana (se for mulher)
- ☐ Mais de 21 bebidas por semana (se for homem); Mais de 14 bebidas por semana (se for mulher)

44. Descreva a opção que melhor descreve os seus hábitos tabágicos

Mark only one oval.

- ☐ Não fumo
- ☐ Fumo até 10 cigarros por dia
- ☐ Fumo mais de 10 cigarros por dia

45. Durante o ano que passou consumiu alguma outra substância psicoativa?

Mark only one oval.

- ☐ Sim
- ☐ Não

46. Se sim, quais?

Tick all that apply.

- ☐ Cannabis ou canabinóides sintéticos
- ☐ Cocaína ou outros estimulantes
- ☐ MDMA / ecstasy
- ☐ Heroína ou outros opiáceos
- ☐ “Ácidos”, ayahuasca ou outros psicadélicos (“alucinogêneos”)

47. Consome antidepressivos?

Mark only one oval.

- ☐ Sim
- ☐ Não

48. **Têm problemas de saúde?**

Mark only one oval.

- ☐ Sim
☐ Não

49. **Quais?**

50. **Toma outros medicamentos (incluindo suplementos nutricionais)?**

Mark only one oval.

- ☐ Sim
☐ Não

51. **Se sim, quais?**

52. **Tem parceiro(a) sexual regular?**

Mark only one oval.

- ☐ Sim
☐ Não

53. **Coabitam?**

Mark only one oval.

- ☐ Sim
☐ Não

54. **Qual a duração do relacionamento?**

55. **Das seguintes opções, qual é a que melhor descreve a sua sexualidade?**

Mark only one oval.

- ☐ Só com o sexo oposto
☐ Principalmente com o sexo oposto
☐ Aproximadamente tanto com o sexo oposto como com o mesmo sexo
☐ Principalmente com o mesmo sexo
☐ Só com o mesmo sexo

No último mês

Escolhe a resposta mais adequada às suas relações sexuais nas últimas quatro semanas.

56. Teve alguma relação sexual no último mês?

Mark only one oval.

☐ Sim

☐ Não *After the last question in this section, skip to question 80.*

57. 1. Com que frequência sentiu desejo ou interesse sexual?

Mark only one oval.

☐ Quase nunca/nunca

☐ Poucas vezes (muito menos de metade das vezes)

☐ Algumas vezes (cerca de metade das vezes)

☐ A maior parte das vezes (muito mais de metade das vezes)

☐ Quase sempre/sempre

58. 2. Como classifica o seu nível (grau) de desejo ou interesse sexual?

Mark only one oval.

☐ Muito baixo/nenhum

☐ Baixo

☐ Moderada

☐ Elevado

☐ Muito elevado

59. 3. Com que frequência se sentiu sexualmente excitada durante as relações sexuais?

Mark only one oval.

☐ Quase nunca/nunca

☐ Poucas vezes (muito menos de metade das vezes)

☐ Algumas vezes (cerca de metade das vezes)

☐ A maior parte das vezes (muito mais de metade das vezes)

☐ Quase sempre/sempre

60. 4. Como classifica o seu nível de excitação sexual durante as relações sexuais?

Mark only one oval.

☐ Muito baixo/nenhum

☐ Baixo

☐ Moderada

☐ Elevado

☐ Muito elevado

61. **5. Qual a sua confiança em conseguir ficar excitada durante as relações sexuais?**

Mark only one oval.

- ☐ Muito baixa
- ☐ Baixa
- ☐ Moderada
- ☐ Elevada
- ☐ Muito elevada

62. **6. Com que frequência se sentiu satisfeita com a sua excitação sexual durante as relações sexuais?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (muito menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (muito mais de metade das vezes)
- ☐ Quase sempre/sempe

63. **7. Com que frequência ficou lubrificada (“molhada”) durante as relações sexuais?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (muito menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (muito mais de metade das vezes)
- ☐ Quase sempre/sempe

64. **8. Qual a dificuldade que teve em ficar lubrificada (“molhada”) durante as relações sexuais?**

Mark only one oval.

- ☐ Nenhuma dificuldade
- ☐ Ligeiramente difícil
- ☐ Difícil
- ☐ Muito difícil
- ☐ Extremamente difícil ou impossível

65. **9. Com que frequência manteve a sua lubrificação (“estar molhada”) até ao fim das relações sexuais?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (muito menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (muito mais de metade das vezes)
- ☐ Quase sempre/sempre

66. **10. Qual a dificuldade que teve em manter a sua lubrificação até ao fim das relações sexuais?**

Mark only one oval.

- ☐ Nenhuma dificuldade
- ☐ Ligeiramente difícil
- ☐ Difícil
- ☐ Muito difícil
- ☐ Extremamente difícil ou impossível

67. **11. Quando teve relações sexuais, com que frequência atingiu o orgasmo (clímax)?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (muito menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (muito mais de metade das vezes)
- ☐ Quase sempre/sempre

68. **12. Quando teve relações sexuais qual a dificuldade que teve para atingir o orgasmo (clímax)?**

Mark only one oval.

- ☐ Nenhuma dificuldade
- ☐ Ligeiramente difícil
- ☐ Difícil
- ☐ Muito difícil
- ☐ Extremamente difícil ou impossível

69. **13. Qual foi o seu nível de satisfação com a sua capacidade para atingir o orgasmo (clímax) durante as relações sexuais?**

Mark only one oval.

- ☐ Muito insatisfeita
- ☐ Moderadamente insatisfeita
- ☐ Igualmente satisfeita e insatisfeita
- ☐ Moderadamente satisfeita
- ☐ Muito satisfeita

70. **14. Qual foi o seu nível de satisfação com o grau de proximidade emocional entre si e a/o sua/seu parceira/o durante as relações sexuais?**

Mark only one oval.

- ☐ Muito insatisfeita
- ☐ Moderadamente insatisfeita
- ☐ Igualmente satisfeita e insatisfeita
- ☐ Moderadamente satisfeita
- ☐ Muito satisfeita

71. **15. Qual o seu nível de satisfação com o relacionamento sexual que mantém com a/o sua/seu parceira/o?**

Mark only one oval.

- ☐ Muito insatisfeita
- ☐ Moderadamente insatisfeita
- ☐ Igualmente satisfeita e insatisfeita
- ☐ Moderadamente satisfeita
- ☐ Muito satisfeita

72. **16. Qual o seu nível de satisfação com a sua vida sexual em geral?**

Mark only one oval.

- ☐ Muito insatisfeita
- ☐ Moderadamente insatisfeita
- ☐ Igualmente satisfeita e insatisfeita
- ☐ Moderadamente satisfeita
- ☐ Muito satisfeita

73. **Teve penetração vaginal (pénis na vagina) nas relações sexuais?**

Mark only one oval.

- ☐ Sim
- ☐ Não *After the last question in this section, skip to question 80.*

74. **17. Com que frequência sentiu dor ou desconforto durante a penetração vaginal?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (mais de metade das vezes)
- ☐ Quase sempre/sempre

75. **18. Com que frequência sentiu dor ou desconforto após a penetração vaginal?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (mais de metade das vezes)
- ☐ Quase sempre/sempre

76. **19. Como classifica o seu nível (grau) de dor ou desconforto durante ou após a penetração vaginal?**

Mark only one oval.

- ☐ Muito baixo/nenhum
- ☐ Baixo
- ☐ Moderado
- ☐ Elevado
- ☐ Muito elevado

77. **20. Durante a penetração vaginal, com que frequência atingiu o orgasmo (clímax) sem estimulação direta do clítoris?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (mais de metade das vezes)
- ☐ Quase sempre/sempre

78. **21. Durante a penetração vaginal, qual a dificuldade que teve para atingir o orgasmo (clímax) sem estimulação direta do clítoris?**

Mark only one oval.

- ☐ Extremamente difícil ou impossível
- ☐ Muito difícil
- ☐ Difícil
- ☐ Ligeiramente difícil
- ☐ Nenhuma dificuldade

79. **22. Qual foi o seu nível de satisfação com a sua capacidade para atingir o orgasmo (clímax) durante a penetração vaginal sem estimulação direta do clítoris?**

Mark only one oval.

- ☐ Muito insatisfeita
- ☐ Moderadamente insatisfeita
- ☐ Igualmente satisfeita e insatisfeita
- ☐ Moderadamente satisfeita
- ☐ Muito satisfeita

Abaixo está uma lista de sentimentos e problemas que as mulheres às vezes têm sobre a sua sexualidade. Assinale a opção que melhor descreve nas últimas quatro semanas.

80. **01. Angustiada com a sua vida sexual**

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

81. **02. Infeliz como o seu relacionamento sexual**

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

82. 03. Culpada pelas suas dificuldades sexuais

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

83. 04. Frustrada pelos seus problemas sexuais

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

84. 05. Stressada com o sexo

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

85. 06. Inferior por causa dos seus problemas sexuais

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

86. 07. Preocupada com o sexo

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

87. 08. Sexualmente problemática

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

88. 09. Arrependida com a sua sexualidade

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

89. 10. Embaraçada sobre os seus problemas sexuais

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

90. 11. Insatisfeita com a sua vida sexual

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

91. 12. Irritada com a sua vida sexual

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

92. **13. Incomodada por baixo desejo sexual**

Mark only one oval.

- ☐ Nunca
- ☐ Raramente
- ☐ Ocasionalmente
- ☐ Frequentemente
- ☐ Sempre

Skip to question 94.

No último mês

93. **Teve alguma relação sexual no último mês?**

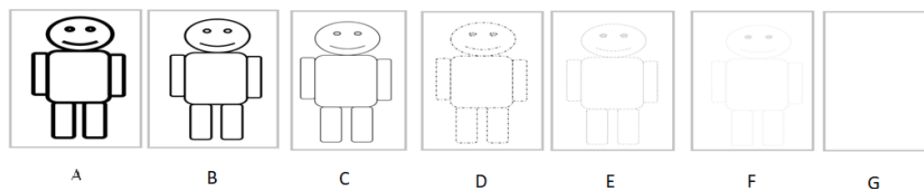
Mark only one oval.

- ☐ Sim
- ☐ Não

Na última relação sexual

Responda às seguintes questões pensando na sua última relação sexual. Se nunca teve relações sexuais, dê esta página por terminada. Não consider masturbação ou sexo virtual relações sexuais, a não ser que a masturbação tenha ocorrida num contexto de relação sexual face-a-face.

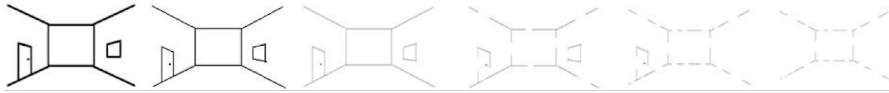
94. **1. Com que intensidade se sentiu a si própria? (com base na imagem)**



Mark only one oval.

- ☐ A
- ☐ B
- ☐ C
- ☐ D
- ☐ E
- ☐ F
- ☐ G

95. 2. Com que intensidade sentiu o espaço ao seu redor?



Mark only one oval.

	1	2	3	4	5	6	7	
Extrema intensidade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Nada

96. 3. Indique o valor na escala de 0 a 100 que melhor descreve com que intensidade sentiu a presença do tempo? (0: Absolutamente nada - 100: Extremamente)



97. 4. Indique o valor na escala de 0 a 100 que melhor descreve com que velocidade sentiu o tempo passar? (0: Extremamente lento - 100: Extremamente Rápido)



98. 5. Até que ponto se sentiu satisfeita com a sua última relação sexual?

Mark only one oval.

	1	2	3	4	5	
Nada satisfeita	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremamente satisfeita

99. 6. Até que ponto sentiu desejo na sua última relação sexual?

Mark only one oval.

	1	2	3	4	5	
Nada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremamente

100. 7. Até que ponto se sentiu excitada?

Mark only one oval.

	1	2	3	4	5	
Nada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremamente

101. **8. Nesta sua última relação sexual, teve um orgasmo através do coito vaginal (pénis na vagina)?**

Mark only one oval.

- ☐ Sim
- ☐ Não

102. **9. O orgasmo no coito vaginal foi:**

Mark only one oval.

- ☐ Com estimulação directa do clítoris
- ☐ Sem estimulação directa do clítoris
- ☐ Houve orgasmos de ambas as formas

103. **10. Nesta sua última relação sexual, teve um orgasmo através do sexo não coital (sexo oral, sexo anal, masturbação)?**

Mark only one oval.

- ☐ Sim
- ☐ Não

104. **11. Nesta sua última relação sexual, estava sob o efeito da alguma substância psicoactiva (incluindo álcool e nicotina)?**

Mark only one oval.

- ☐ Sim
- ☐ Não

105. **12. Se sim, quais?**

Powered by

 Google Forms

Durante a última relação sexual

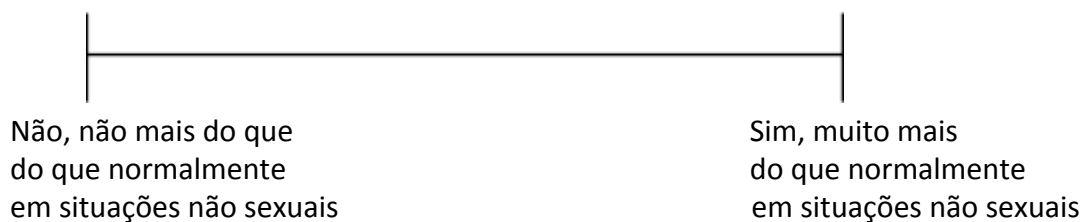
De seguida encontra uma série de frases que descrevem estados que podem ser desencadeados por uso de substâncias, hipnose, meditação, ou alguns acontecimentos de vida. Por vezes também ocorrem durante a actividade sexual. Indique até que ponto sentiu que estes estados estavam a ocorrer durante a sua última relação sexual ou pouco depois, comparativamente à sua consciência usual do dia-a-dia (em contextos não sexuais). Indique a alteração que sentiu com um número entre 1 e 100.

Tenha em conta que o seu estado de consciência usual corresponde ao extremo esquerdo da linha.

1) Tudo pareceu tornar-se uma unidade.



2) Parece que eu e tudo o que me rodeava estávamos unidos.



3) Senti um toque de eternidade.



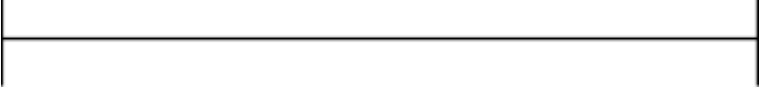
4) Conflitos e contradições pareceram dissolver-se.



5) **Senti o passado, o presente e o futuro unirem-se.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

6) **Senti que estava ligado a um poder superior.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

7) **Senti um grande respeito pelo que estava a acontecer.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

8) **A minha experiência teve aspectos espirituais.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

9) **Senti um prazer sem limites.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

10) **Senti uma paz profunda dentro de mim.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

11) **Senti um amor que tudo abrange.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

12) **Senti-me muito profundo.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

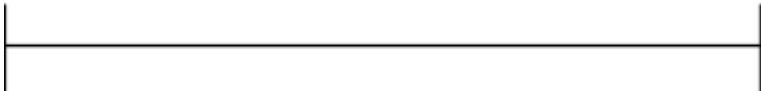
13) **Entendi melhor ligações (entre coisas) que me têm intrigado.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

14) **Tive pensamentos muito originais.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

15) **Parecia que eu não tinha mais corpo.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

16) **Tive a sensação de estar fora do meu corpo.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

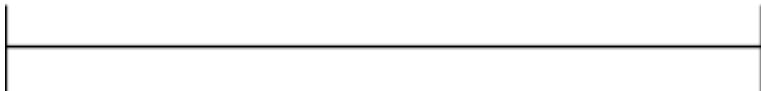
17) **Parecia que eu estava a flutuar.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

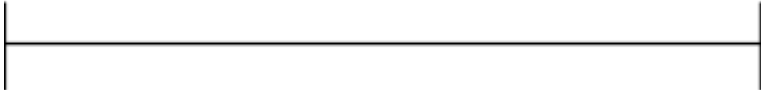
18) **Senti-me uma marionete.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

19) **Tive dificuldades em tomar a mais pequena decisão.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

20) **Tive dificuldades em distinguir coisas importantes de coisas não importantes.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

21) **Senti-me paralisado.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

22) **Senti-me isolado de tudo e de todos.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

23) **Não era capaz de completar um pensamento, o meu pensamento parecia repetidamente desconexo.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

24) **Senti que não tinha mais vontade própria.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

25) Tive medo de que o estado em que estava durasse para sempre.

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

26) Estava com medo mas sem saber exactamente de quê.

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

27) Senti tudo assustadoramente distorcido.

Não, não mais do que
do que normalmente
em situações não sexuais

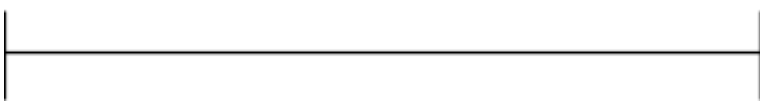
Sim, muito mais
do que normalmente
em situações não sexuais

28) Senti que tudo à minha volta estava estranho.

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

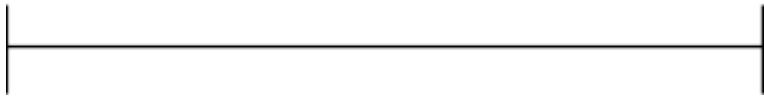
29) Senti-me ameaçado/a.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

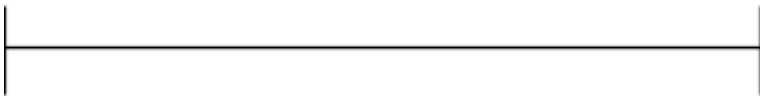
30) Tive a sensação de que algo terrível iria acontecer.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

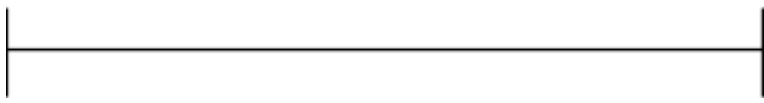
31) Vi cenas a passarem-se na escuridão total ou de olhos fechados.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

32) Vi imagens do meu passado ou fantasias de forma extremamente vívida.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

33) A minha imaginação estava extremamente vívida.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

34) Vi padrões regulares na escuridão total ou de olhos fechados.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

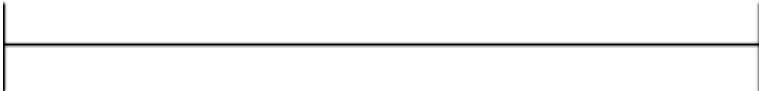
35) Vi cores na escuridão total ou de olhos fechados.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

36) Vi luzes ou flashes de luz na escuridão total ou de olhos fechados.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

37) Os sons pareciam que influenciavam o que estava a ver.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

38) As formas das coisas pareciam mudar por causa dos sons.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

39) Parecia que as cores das coisas mudavam por causa dos sons.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

40) Tudo pareceu ganhar um significado especial.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

41) **As coisas à minha volta adquiriram novo e intrigante significado.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

42) **Os objectos à minha volta suscitavam-me emoções mais intensas do que o habitual.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

Annex V – Online Questionnaire (male version in Portuguese)

Este estudo enquadra-se num projeto de investigação levado a cabo no ISPA - Instituto Universitário e tem como principal objetivo compreender de que modo a personalidade se relaciona com a sexualidade.

As suas respostas serão anónimas e confidenciais. É importante que responda a todas as perguntas com honestidade. Todavia, se não se sentir confortável a responder a alguma, sinta-se à vontade para não responder a essa questão em particular.

Este questionário demorará cerca de 15 minutos.

Caso surja alguma dúvida ou questão por favor contacte o professor orientador Rui Miguel Costa para rcosta@ispa.pt

1. Idade

2. Profissão

3. Habilitações literárias

4. Nacionalidade

5. Estado civil

6. 1. Às vezes sinto as coisas da mesma maneira como quando era criança

Mark only one oval.

1 2 3 4 5

Discordo Totalmente

☐☐☐☐☐

Concordo Totalmente

7. **2. Posso ficar comovido quando ouço um discurso muito bonito, uma poesia ou uma canção de que gosto**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

8. **3. Quando estou a ver um filme ou um programa de televisão, posso ficar tão envolvido que esqueço onde estou e vivo a história como se fosse verdadeira e eu estivesse a tomar parte dela**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

9. **4. Quando olho para uma fotografia ou pintura e depois desvio o olhar, às vezes posso “ver” a imagem da fotografia/pintura, quase como se estivesse a olhar para ela**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

10. **5. Às vezes sinto que é como se a minha mente envolvesse o mundo inteiro**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

11. **6. Eu gosto de observar as nuvens a mudarem de forma no céu**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

12. **7. Se eu quiser, posso imaginar as coisas com tanta clareza, que é como se estivesse a ver um filme**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

13. **8. Eu penso que sei o que algumas pessoas querem dizer quando falam acerca de experiências sobrenaturais**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

14. **9. Eu por vezes saio do meu eu normal e entro num estado de ser completamente diferente**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

15. **10. Tocar em coisas como lã, areia ou madeira, às vezes faz-me lembrar certas cores ou músicas**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

16. **11. Às vezes sinto as coisas à minha volta com muita intensidade, como se fossem duplamente reais**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

17. **12. Quando ouço música posso ficar tão envolvido que não noto nada à minha volta**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

18. **13. Se eu quisesse, posso imaginar que o meu corpo é tão pesado que não o poderia mexer mesmo que quisesse**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

19. **14. Frequentemente, posso sentir a presença de uma pessoa antes de a ver ou ouvir**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

20. **15. O estalar do lume e as chamas de uma lareira acesa estimulam a minha imaginação**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

21. **16. Às vezes é possível eu estar completamente imerso na natureza ou na arte e sinto como se todo o meu estado de consciência tivesse sido temporariamente alterado**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

22. **17. Cores diferentes têm significados particulares e especiais para mim**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

23. **18. Consigo perder-me nos meus pensamentos enquanto faço uma tarefa usual, ao ponto de esquecer o que estou a fazer e daí a minutos chegar à conclusão de que já acabei a tarefa**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

24. **19. Às vezes posso lembrar-me de coisas do meu passado de forma tão clara e vívida que é quase como se estivesse a vivê-las de novo**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

25. **20. Coisas que não fazem sentido para os outros, muitas vezes fazem sentido para mim**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

26. **21. Se eu estivesse a representar uma peça de teatro, eu acho que conseguiria sentir as emoções do personagem e tornar-me tal como ele, não pensando em mim próprio ou na audiência**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

27. **22. Os meus pensamento vêm-me à cabeça como imagens visuais e não como palavras**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

28. **23. Frequentemente tenho prazer em coisas pequenas, como ver uma folha que cai ou cheirar uma flor**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

29. **24. Quando ouço música forte, como de banda ou orquestra, às vezes sinto como se estivesse a ser elevado no ar**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

30. **25. Às vezes posso fazer com que o barulho pareça música pelo modo como o ouço**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

31. **26. Algumas das minhas recordações mais vivas vêm através de certos cheiros**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

32. **27. Algumas peças de música fazem-me pensar em fotografias ou pinturas com muitas cores**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

33. **28. Frequentemente eu sei o que alguém vai dizer antes de ele(a) falar**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

34. **29. Muitas vezes tenho “memórias físicas”, por exemplo, depois de ter estado a nadar, posso sentir-me como se ainda estivesse na água**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

35. **30. O som de uma voz pode ser tão fascinante para mim que eu não paro de a ouvir**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

36. **31. Às vezes eu sinto a presença de alguém que não está fisicamente presente**

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

37. 32. Às vezes pensamentos e imagens vêm-me à cabeça sem qualquer esforço da minha parte

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

38. 33. Eu acho que cheiros diferentes têm cores diferentes

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

39. 34. Um pôr-do-sol pode comover-me profundamente

Mark only one oval.

	1	2	3	4	5	
Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo Totalmente

40. Qual a porcentagem de tempo em que, de olho abertos, vê o seu campo visual cheio de pequenos pontos de luz ou cheio de pontos de luz

Mark only one oval.

☐ 0% - Nunca

☐ 10%

☐ 20%

☐ 30%

☐ 40%

☐ 50%

☐ 60%

☐ 70%

☐ 80%

☐ 90%

☐ 100% - Muito frequentemente

41. 1) Estes pontos de luz incomodam-no?

Mark only one oval.

Absolutamente nada

Extremamente

42. 2) Estes pontos de luz fascinam-no?

Mark only one oval.

	1	2	3	4	5	6	7	
Absolutamente nada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Extremamente

43. Assinale a opção que melhor descreve o seu consumo de álcool.

Mark only one oval.

- ☐ Não bebo
- ☐ Menos de 3 bebidas por semana
- ☐ Entre 3 e 10 bebidas por semana (se for homem); Entre 3 e 7 bebidas por semana (se for mulher)
- ☐ Entre 11 e 21 bebidas por semana (se for homem); Entre 8 e 14 bebidas por semana (se for mulher)
- ☐ Mais de 21 bebidas por semana (se for homem); Mais de 14 bebidas por semana (se for mulher)

44. Descreva a opção que melhor descreve os seus hábitos tabágicos

Mark only one oval.

- ☐ Não fumo
- ☐ Fumo até 10 cigarros por dia
- ☐ Fumo mais de 10 cigarros por dia

45. Durante o ano que passou consumiu alguma outra substância psicoativa?

Mark only one oval.

- ☐ Sim
- ☐ Não

46. Se sim, quais?

Tick all that apply.

- ☐ Cannabis ou canabinóides sintéticos
- ☐ Cocaína ou outros estimulantes
- ☐ MDMA / ecstasy
- ☐ Heroína ou outros opiáceos
- ☐ “Ácidos”, ayahuasca ou outros psicadélicos (“alucinogéneos”)

47. Consome antidepressivos?

Mark only one oval.

- ☐ Sim
- ☐ Não

48. **Têm problemas de saúde?**

Mark only one oval.

- ☐ Sim
☐ Não

49. **Quais?**

50. **Toma outros medicamentos (incluindo suplementos nutricionais)?**

Mark only one oval.

- ☐ Sim
☐ Não

51. **Se sim, quais?**

52. **Tem parceiro(a) sexual regular?**

Mark only one oval.

- ☐ Sim
☐ Não

53. **Coabitam?**

Mark only one oval.

- ☐ Sim
☐ Não

54. **Qual a duração do relacionamento?**

55. **Das seguintes opções, qual é a que melhor descreve a sua sexualidade?**

Mark only one oval.

- ☐ Só com o sexo oposto
☐ Principalmente com o sexo oposto
☐ Aproximadamente tanto com o sexo oposto como com o mesmo sexo
☐ Principalmente com o mesmo sexo
☐ Só com o mesmo sexo

No último mês

Escolhe a resposta mais adequada às suas relações sexuais nas últimas quatro semanas.

56. **Teve alguma relação sexual no último mês?**

Mark only one oval.

☐ Sim

☐ Não *After the last question in this section, skip to question 77.*

57. **1. Com que frequência foi capaz de conseguir uma ereção durante a sua atividade sexual?**

Mark only one oval.

☐ Quase nunca/nunca

☐ Poucas vezes (muito menos de metade das vezes)

☐ Algumas vezes (cerca de metade das vezes)

☐ A maior parte das vezes (muito mais de metade das vezes)

☐ Quase sempre/sempe

58. **2. Quando teve ereções com estimulação sexual, qual a frequência em que estas ereções foram suficientemente rígidas para permitir a penetração?**

Mark only one oval.

☐ Quase nunca/nunca

☐ Poucas vezes (muito menos de metade das vezes)

☐ Algumas vezes (cerca de metade das vezes)

☐ A maior parte das vezes (muito mais de metade das vezes)

☐ Quase sempre/sempe

59. **3. Quando tentou ter relações sexuais, quantas vezes foi capaz de penetrar a sua companheira?**

Mark only one oval.

☐ Quase nunca/nunca

☐ Poucas vezes (muito menos de metade das vezes)

☐ Algumas vezes (cerca de metade das vezes)

☐ A maior parte das vezes (muito mais de metade das vezes)

☐ Quase sempre/sempe

60. **4. Durante as relações sexuais, quantas vezes foi capaz de manter a sua ereção depois de ter penetrado a sua companheira?**

Mark only one oval.

☐ Quase nunca/nunca

☐ Poucas vezes (muito menos de metade das vezes)

☐ Algumas vezes (cerca de metade das vezes)

☐ A maior parte das vezes (muito mais de metade das vezes)

☐ Quase sempre/sempe

61. **5. Durante as relações sexuais, qual a dificuldade que teve para manter a sua ereção até ao fim da relação sexual?**

Mark only one oval.

- ☐ Extrema dificuldade
- ☐ Muita dificuldade
- ☐ Dificuldade moderada
- ☐ Ligeira dificuldade
- ☐ Nenhuma dificuldade

62. **6. Durante as relações sexuais com que frequência se sentiu muito excitado?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (muito menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (muito mais de metade das vezes)
- ☐ Quase sempre/sempre

63. **7. Quando tentou ter relações sexuais, qual a frequência com que se sentiu satisfeito?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (muito menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (muito mais de metade das vezes)
- ☐ Quase sempre/sempre

64. **8. Qual o grau de satisfação que teve com as suas relações sexuais?**

Mark only one oval.

- ☐ Nenhuma satisfação
- ☐ Pouca satisfação
- ☐ Satisfação moderada
- ☐ Grande satisfação
- ☐ Muito grande satisfação

65. **9. Quando teve relações sexuais, com que frequência ejaculou?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (muito menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (muito mais de metade das vezes)
- ☐ Quase sempre/sempre

66. **10. Quando teve relações sexuais, com que frequência teve a sensação de orgasmo ou clímax?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes (muito menos de metade das vezes)
- ☐ Algumas vezes (cerca de metade das vezes)
- ☐ A maior parte das vezes (muito mais de metade das vezes)
- ☐ Quase sempre/sempre

67. **11. Com que frequência sentiu desejo sexual?**

Mark only one oval.

- ☐ Quase nunca/nunca
- ☐ Poucas vezes
- ☐ Algumas vezes
- ☐ A maior parte das vezes
- ☐ Quase sempre/sempre

68. **12. Como classifica o seu desejo sexual?**

Mark only one oval.

- ☐ Muito baixo/nenhum
- ☐ Baixo
- ☐ Moderada
- ☐ Elevado
- ☐ Muito elevado

69. **13. Qual a sua satisfação com a sua vida sexual em geral?**

Mark only one oval.

- ☐ Grande insatisfação
- ☐ Insatisfação moderada
- ☐ Igualmente satisfeito e insatisfeito
- ☐ Satisfação moderada
- ☐ Grande satisfação

70. **14. Qual a sua satisfação com o relacionamento sexual com a sua parceira?**

Mark only one oval.

- ☐ Grande insatisfação
- ☐ Insatisfação moderada
- ☐ Igualmente satisfeito e insatisfeito
- ☐ Satisfação moderada
- ☐ Grande satisfação

71. **15. Qual a confiança que tem em conseguir atingir e manter uma ereção?**

Mark only one oval.

- ☐ Muito baixa
- ☐ Baixa
- ☐ Moderada
- ☐ Elevada
- ☐ Muito elevada

72. **01. Até que ponto é difícil para si atrasar a sua ejaculação (libertação do sémen)?**

Mark only one oval.

- ☐ Não é difícil
- ☐ Um pouco difícil
- ☐ Moderadamente difícil
- ☐ Muito difícil
- ☐ Extremamente difícil

73. **02. Ejacula antes de querer?**

Mark only one oval.

- ☐ Quase nunca ou nunca 0%
- ☐ Menos da metade das vezes 25%
- ☐ Cerca de metade das vezes 50%
- ☐ Mais que metade das vezes 75%
- ☐ Quase sempre ou sempre 100%

74. **03. A sua ejaculação acontece com pouco estímulo?**

Mark only one oval.

- ☐ Quase nunca ou nunca 0%
- ☐ Menos da metade das vezes 25%
- ☐ Cerca de metade das vezes 50%
- ☐ Mais que metade das vezes 75%
- ☐ Quase sempre ou sempre 100%

75. **04. Sente-se frustrado porque ejacula antes de querer?**

Mark only one oval.

- ☐ De modo nenhum
- ☐ Levemente
- ☐ Moderadamente
- ☐ Muito
- ☐ Extremamente

76. **05. Até que ponto fica preocupado por achar que o tempo que demora a ejacular poderá deixar a sua parceira sexual insatisfeita?**

Mark only one oval.

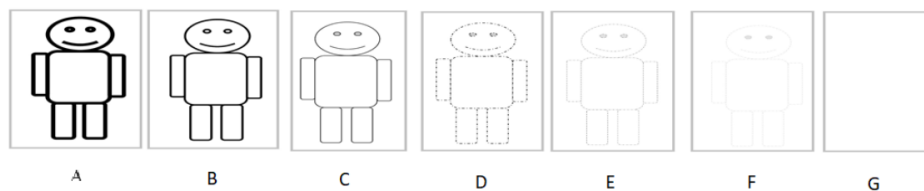
- ☐ De modo nenhum
- ☐ Levemente
- ☐ Moderadamente
- ☐ Muito
- ☐ Extremamente

Skip to question 77.

Na última relação sexual

Responda às seguintes questões pensando na sua última relação sexual. Se nunca teve relações sexuais, dê esta página por terminada. Não considere masturbação ou sexo virtual relações sexuais, a não ser que a masturbação tenha ocorrida num contexto de relação sexual face-a-face.

77. 1. Com que intensidade se sentiu a si próprio? (com base na imagem)



Mark only one oval.

- ☐ A
- ☐ B
- ☐ C
- ☐ D
- ☐ E
- ☐ F
- ☐ G

78. 2. Com que intensidade sentiu o espaço ao seu redor? (com base na imagem)



Mark only one oval.

- [illegible]

79. 3. Indique o valor na escala de 0 a 100 que melhor descreve com que intensidade sentiu a presença do tempo. (0: Absolutamente nada - 100: Extremamente)



80. 4. Indique o valor na escala de 0 a 100 que melhor descreve com que velocidade sentiu o tempo passar. (0: Extremamente lento - 100: Extremamente Rápido)



81. 5. Até que ponto se sentiu satisfeito com a sua última relação sexual?

Mark only one oval.

1 2 3 4 5

Nada satisfeito ☐ ☐ ☐ ☐ ☐ Extremamente satisfeito

82. 6. Até que ponto sentiu desejo na sua última relação sexual?

Mark only one oval.

1 2 3 4 5

Nada ☐ ☐ ☐ ☐ ☐ Extremamente

83. 7. Até que ponto se sentiu excitado?

Mark only one oval.

1 2 3 4 5

Nada ☐ ☐ ☐ ☐ ☐ Extremamente

84. 8. Nesta sua última relação sexual, teve um orgasmo através do coito vaginal (pénis na vagina)?

Mark only one oval.

☐ Sim

☐ Não

85. **10. Nesta sua última relação sexual, teve um orgasmo através do sexo não coital (sexo oral, sexo anal, masturbação)?**

Mark only one oval.

☐ Sim

☐ Não

86. **11. Nesta sua última relação sexual, estava sob o efeito da alguma substância psicoactiva (incluindo álcool e nicotina)?**

Mark only one oval.

☐ Sim

☐ Não

87. **Se sim, qual ou quais?**

Powered by



Durante a última relação sexual

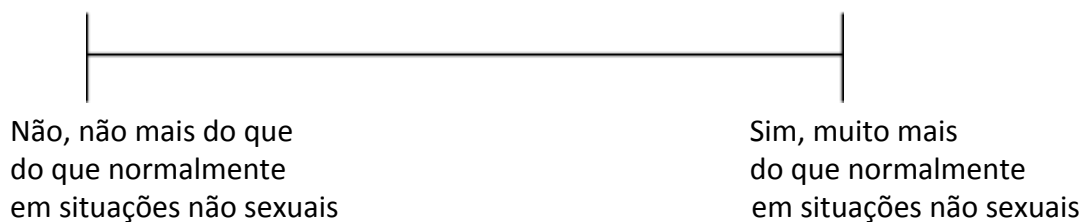
De seguida encontra uma série de frases que descrevem estados que podem ser desencadeados por uso de substâncias, hipnose, meditação, ou alguns acontecimentos de vida. Por vezes também ocorrem durante a actividade sexual. Indique até que ponto sentiu que estes estados estavam a ocorrer durante a sua última relação sexual ou pouco depois, comparativamente à sua consciência usual do dia-a-dia (em contextos não sexuais). Indique a alteração que sentiu com um número entre 1 e 100.

Tenha em conta que o seu estado de consciência usual corresponde ao extremo esquerdo da linha.

1) Tudo pareceu tornar-se uma unidade.



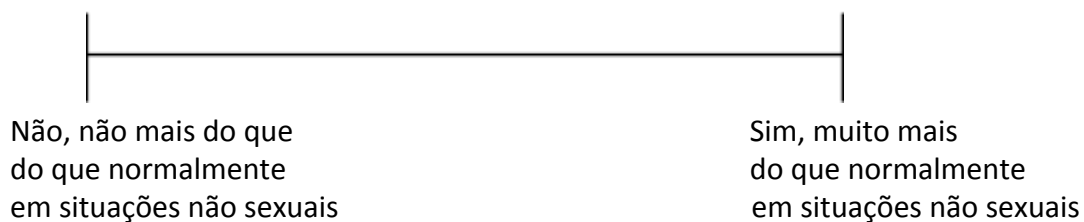
2) Parece que eu e tudo o que me rodeava estávamos unidos.



3) Senti um toque de eternidade.



4) Conflitos e contradições pareceram dissolver-se.



5) **Senti o passado, o presente e o futuro unirem-se.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

6) **Senti que estava ligado a um poder superior.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

7) **Senti um grande respeito pelo que estava a acontecer.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

8) **A minha experiência teve aspectos espirituais.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

9) **Senti um prazer sem limites.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

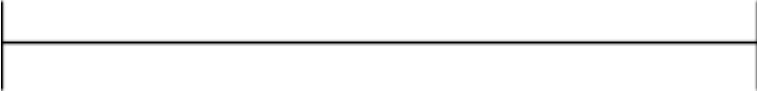
10) **Senti uma paz profunda dentro de mim.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

11) **Senti um amor que tudo abrange.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

12) **Senti-me muito profundo.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

13) **Entendi melhor ligações (entre coisas) que me têm intrigado.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

14) **Tive pensamentos muito originais.**

	
Não, não mais do que do que normalmente em situações não sexuais	Sim, muito mais do que normalmente em situações não sexuais

15) **Parecia que eu não tinha mais corpo.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

16) **Tive a sensação de estar fora do meu corpo.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

17) **Parecia que eu estava a flutuar.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

18) **Senti-me uma marionete.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

19) **Tive dificuldades em tomar a mais pequena decisão.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

20) **Tive dificuldades em distinguir coisas importantes de coisas não importantes.**

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

21) **Senti-me paralisado.**

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

22) **Senti-me isolado de tudo e de todos.**

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

23) **Não era capaz de completar um pensamento, o meu pensamento parecia repetidamente desconexo.**

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

24) **Senti que não tinha mais vontade própria.**

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

25) Tive medo de que o estado em que estava durasse para sempre.

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

26) Estava com medo mas sem saber exactamente de quê.

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

27) Senti tudo assustadoramente distorcido.

Não, não mais do que
do que normalmente
em situações não sexuais

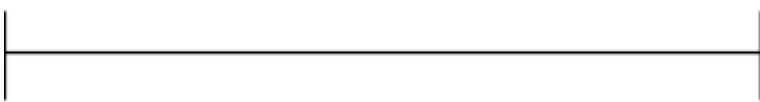
Sim, muito mais
do que normalmente
em situações não sexuais

28) Senti que tudo à minha volta estava estranho.

Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

29) Senti-me ameaçado/a.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

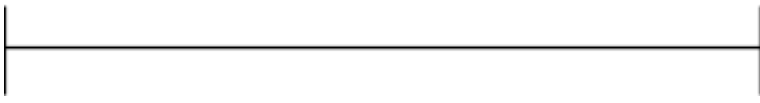
30) Tive a sensação de que algo terrível iria acontecer.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

31) Vi cenas a passarem-se na escuridão total ou de olhos fechados.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

32) Vi imagens do meu passado ou fantasias de forma extremamente vívida.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

33) A minha imaginação estava extremamente vívida.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

34) Vi padrões regulares na escuridão total ou de olhos fechados.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

35) Vi cores na escuridão total ou de olhos fechados.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

36) Vi luzes ou flashes de luz na escuridão total ou de olhos fechados.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

37) Os sons pareciam que influenciavam o que estava a ver.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

38) As formas das coisas pareciam mudar por causa dos sons.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

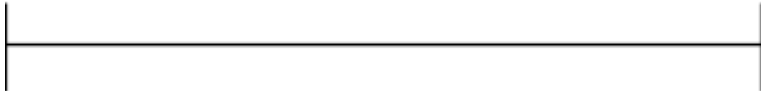
39) Parecia que as cores das coisas mudavam por causa dos sons.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

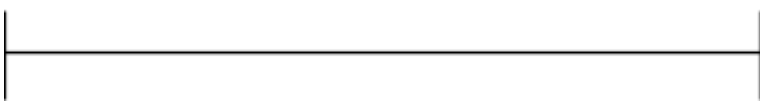
40) Tudo pareceu ganhar um significado especial.



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

41) **As coisas à minha volta adquiriram novo e intrigante significado.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais

42) **Os objectos à minha volta suscitavam-me emoções mais intensas do que o habitual.**



Não, não mais do que
do que normalmente
em situações não sexuais

Sim, muito mais
do que normalmente
em situações não sexuais