# UNIVERSITY OF TWENTE

# Psychedelics; Intention and attitude amongst the general public

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### **Abstract**

The present study examines the attitude towards psychedelic substances and its uses amongst the general population. Psychedelics are defined as substances that increase connectivity among typically unrelated brain networks, its physiological effects being induced by an increase of serotonin receptors. Previous research conducted in the 1950s and 60s supposes a high potential for psychedelic medications to markedly alleviate depression and suffering, associated with terminal illness. Further exploration of the therapeutic potential of psychedelics was undermined after the 1960s, due to media and societal narratives. However, recent studies shed light on the safety and efficacy of psychedelic substances when administered in a medically supervised and monitored approach. Nevertheless, psychedelics are still illegal in many countries; the level of acceptance amongst the general public and the field of pharmacology is still unknown. Hence, an investigation of the attitude and the intention towards using psychedelics is subject to the current study. The theory of planned behaviour along with a brief adaptation of the ABC model is used in this study for creating a framework that is designed to observing the attitude towards psychedelics and the effect of this attitude and subjective norm on the intention to try psychedelics. From an exploratory perspective the study also looks to answer additional questions that could shed light on the effects of sources of information and previous experiences on the formation of the attitude and intention towards psychedelics. With the help of a questionnaire, responses from 284 participants were collected. Using regression analysis it was concluded that the Media narratives help to maintain a more negative attitude towards psychedelics, while fear reduces the intention to try and induces a negative Attitude towards psychedelics. The analysis also revealed that people with previous experiences had very different opinions and intentions towards psychedelics than the ones who had not had any experience. The motivation of this paper is in parallel with other research which claims to present the need for attitude change from an institutional and reputational perspective for a progressive scientific growth in the field of psychedelics. Therefore, the vision of this study is to foster a scientific discourse that is more balanced in order to explore the relevant risks and uses of psychedelics.

### Introduction

Cancer is one of the most prevalent illnesses with global morbidity and mortality, and along with the physical trauma patients go through, the psychological effects during and post treatment are significant (Ross, 2018). One of the most common factors to be considered in cancer patients is the psychological and existential suffering associated with poor psychotic and medical outcomes (Ross, 2018). Death, anxiety and PTSD are some of the many psychological disorders identified in cancer survivors (Cella & Tross, 1986). Furthermore, studies suggest a bidirectional correlation between cancer and depression (Peit, Wurtzen & Zacharie, 2012). Recent studies have represented positive results in treating patients with these psychological symptoms using psychedelics (Carhart-Harris and Goodwin 2017). It seems that we are in the midst of a cultural zeitgeist, with regards to psychedelic drugs such as LSD, DMT and Psilocybin (Carhart-Harris, Erritzoe, Hijen, Kaelen & Watts, 2018). Resultantly, the scientific community proposes to main-stream the use of psychedelics in the field of psychiatry (Carhart-Harris and Goodwin 2017).

In the past two decades, significant research on psychedelics has focused on exploring the use of them in treating psychological disorders, especially in cancer survivors. Three FDA trials monitored a single dose of psilocybin, administered to 92 cancer patients (with either threatening or terminal cancer). The results suggested that the single dose psilocybin-assisted therapy for patients with cancer-related psychiatric illness produced a number of positive effects, such as antidepressant and anxiolytic responses in patients and decreased relapse rates. Furthermore, these improvements were sustained up to several months in cancer patients suffering anxiety and depression (Ross, 2018). Psilocybin-assisted therapy has also resulted in improvements of other parameters, such as existential stress, demoralisation, hopelessness, death anxiety and perceived quality of life (Griffiths et al., 2016; Grob et al., 2011; Ross et al., 2016). In all the trials, the improvements were noted soon after administering just one single dose use of psilocybin, and remained sustainable (without indication of reliance) on repeated use of the substance. Psychedelics have also been used in trials to cure alcoholism and heroin addiction (Krebs & Johanson, 2012).

# **Psychedelics**

Derived from the Greek language, the term psychedelics is an amalgamation of two parts, "psyche" meaning mind, and "delos" meaning clarity brought to light (Carhart-Harris et al. 2012a). There are several types of drugs that are classified under psychedelics, namely Lysergic acid diethylamide (LSD), dimethyltryptamine (DMT), mescaline and psilocybin (the active ingredient in magic mushrooms). Pharmacological evidence suggests that these substances act as agonists of the 5-HT2A serotonin receptor (Carhart-Harris et al. 2012a). The general consensus is that psychedelics disrupt the functioning of the neural mechanisms that normally constrain cognition, perception, and emotion (Swanson, 2018), along with inducing an entropic brain state (Carhart-Harris, 2018). This brain state is explained by a reduction within network connectivity and increased connectivity between typically unrelated brain networks (Carhart-Harris et al. 2016c). These changes in functional connectivity, induced by psychedelics, result in the myriad changes in perception and cognition that are well-documented in popular culture, such as visual hallucinations (Carhart-Harris et al. 2016c) and the sense of becoming "one with everything" (Tagliazucchi et al. 2016). Hence, the physiological effects of psychedelics are indicated by an increase in the serotonin receptors and heightened activity of neural networks.

Serotonin has been recognised as central to the psychedelics well-known phenomenological, physical, emotional and cognitive dynamics. This is directly relevant to the treatment of addiction, as the serotonin levels found in the addict population are found to be significantly reduced. The increased

serotonin levels caused by psychedelic use act as neuromodulators affecting the activation of other neurotransmitter systems, thus giving rise to the "therapeutic effect" (Winkelma,2014).

### **Psychedelics versus Psychiatric medications**

In the last few decades the understanding of neurobiological parameters of mental illness has grown significantly (Ross, 2018). However, there has been an increase in uses of more conventional modern psychiatric medications. Common psychiatric medication, such as selective serotonin reuptake inhibitors often do not provide a permanent solution to the underlying causes of psychopathology, resulting in a dependency (Johnson, Hendricks, Barret & Griffiths, 2019). In other words creating an addiction towards the medication, and a relapse of the psychopathology when the medication has been discontinued. A promising pharmacological paradigm for treatment of many forms of psychopathologies, such as, anxiety and mood related disorders, would involve a lowered reliance and dependence on medications. Conceptually speaking, the aim to reduce psychopathology would focus on existential humanistic factors that emphasises confronting concepts such as social isolation, meaninglesness, freedom and fear of death in order for people to flourish (Yalom, 1980). Also known as the existential humanistic approach. This is predicted by the effects of psychedelics on variable concepts such as connectedness, meaning and death transcendence, which have further coincided with improvements in psychological well being (e.g. Griffiths et al. 2016; Griffiths et al. 2011). Psychedelics are one of a kind amongst drugs in their ability to reliably produce salutary and sustainable effects on the user even after the user has stopped taking the drug for a long time (Curran et al. 2018; Hendricks 2018). Therefore indicating that it does not promote dependency or addiction towards the drug

### Resistance towards psychedelics

However, there is significant resistance and fear of these substances amongst the general public and professionals in the psychiatric fields. Furthermore, psychotropic drugs have been deemed illegal globally in 184 countries, as a part of the UN convention on psychotropic substances (Sessa, 2018). This indicates that the perceived effects of psychedelics appear to be based more on social analyses rather than pharmacological ones, especially the perceived negative effects (Sessa, 2018). As can be seen, the public perception of psychedelics is the main factor enabling or disabling its utilization in mental health settings. This makes research on the public attitude towards psychedelics inevitable, to identify a starting point concerning how the public can be educated on the positive potential of psychedelics.

Thus, the aim of this research is to observe the Attitude towards psychedelics and its uses amongst the general public based on Awareness, and Fear for the substance, along with the Subjective Norm towards taking psychedelics. Hence, In order to understand the attitude formation amongst the general public towards psychedelics, understanding the context of psychedelics from socio-political perspective becomes imperative.

### Legal History and media demonisation

The overall influence of mass media has increased drastically over the years, and will continue to do so, as the media itself improves and expands across different formats (Feher, 2018). The media in the last 40 years have had a huge influence on the way psychedelics have been perceived by the general public, especially with information that was not scientifically confirmed (Feher, 2018). In 1966, LSD was banned as it leaked from the medical community and was widely used recreationally, virtually halting all medical research and production within years. A plethora of reports followed, suggesting LSD causes chromosome damage (Cohen et al.1967; Dishotsky et al.1971), subsequently leading to disputes and fuelling public fear since the 1970s (Grof 1980). Reviews of media reports suggest that psychedelics and marijuana were particularly demonised along with chemical drugs such as cocaine, heroin and other

dopamine agonists, and labeled under the same overarching category of "addictive substances" (Feher, 2018). Users were depicted as hippies or as victims of predation by villainous drug dealers. This analysis is consistent with cultural criminology research on media depiction of illicit drugs (Stodart, 2006). Studies show that the mass media have a heuristic role in being the primary source of information for understanding science and innovation, and this largely contributes to the existing psychedelic stigma resulting in institutional, financial and reputational challenges for psychedelic science (Feher, 2018). Therefore, a part of this study is exploring the effect the media narratives have on the awareness and attitude towards psychedelics amongst the general public.

# The Bad Trip

During a psychedelic experience, some users experience substance-induced psychosis and later develop an enduring psychotic disorder such as schizophrenia (Murrie, Lapen, Large & Sara, 2019). One term that often surfaces in the context of a psychedelic experience is "The Bad Trip", which refers to a frightening or an unpleasant experience a user faces during the influence of psychoactive drugs (Bunce, 1979). Bad trips can occur due to the inexperience of the user, or lack of proper preparation, secure environment, guide for the psychedelic session and a reflection of unresolved psychological tensions triggered during the experience (Sellers, 2017). Bad trips during a psychedelic drug use were also analysed from a social perspective rather than solely from a pharmacological and neurological perspective (Bunce, 1979). In other words, the fear of consuming psychedelics outside the boundaries of the law and the subjective norm towards psychedelics itself were considered grounds for inducing a bad trip in a person using it for the first time. By the late 70s this conflict shifted and there was a decline in the number of bad trips with new user groups (Bunce, 1979).

### **Set and Setting**

Having received bad press due to many reasons like recreational abuse and negative individuals experiences amongst users, this can be nuanced if one takes into account the set and setting under which a user takes psychedelics. According to psychedelic researcher Timothy Leary, the result of a trip is based on the set and setting (Leary, 2009). In other words a good set and setting also refers to an environment where the user feels safe and private. Leary in his book also claimed that the frequency of difficult trips were highly exaggerated by anecdotes and fabrications in the popular press back in the 60s (Leary, 2009). Furthermore, when prepared with adequate counselling and preparation of a pleasing environment, the effects prove to be highly beneficial (Byok, 2018).

Therefore, the perceived safety and privateness of the environment during the psychedelic experience, the expectancy of the experience and the nature of the psychedelic experience would be able to predict the level of Awareness and Fear towards psychedelics.

#### **Theoretical Framework**

### **Theory Of Planned Behaviour**

In order to develop the theoretical framework of this research, the foundations of the theory of planned behaviour is used, along with a brief adaptation of the ABC model of attitude formation.

According to theory of planned behaviour, the determinants of any behaviour, is the behavioural intention which is predicted by subjective norm, attitude and perceived behavioural control (Ajzen, 2011). The theory states that human behaviour is guided three considerations namely Behavioural beliefs, which are beliefs about probable consequences and associated experiences with the behaviour, Control beliefs which are beliefs about the factors that may impede or facilitate the performance of that behaviour, and lastly normative beliefs which are beliefs about the normative expectations of significant others (Ajzen,

2006). Therefore, behavioural beliefs produce a favourable or unfavourable 'Attitude' towards a behaviour, while normative beliefs relate to the perceived social pressure or 'Subjective Norm' and lastly control beliefs relates to the self efficacy or perceived behavioural control (Ajzen, 2006). Behavioural control moderates the effects of attitude towards the behaviour and subjective norm on intention. Generally speaking the more favourable the attitude and subjective norm, the higher the perceived behavioural control and thus the stronger the intention to perform the behaviour. In the context of this research, the behaviour in question would be taking psychedelics. Hence, when the opportunity arises given a sufficient degree of control over the behaviour, people carry out their intentions. Thus, intention is assumed to be the immediate antecedent of behaviour (Ajzen, 2011). The following Figure.1 is a schematic representation of the theory.

Further, in the description of the theoretical framework below, the determinants of the TPB model Attitude, Subjective Norm and Perceived behavioural control are described, followed by the Intention. Intention in the context of this research refers to Intention to try psychedelics, and seek information about psychedelics. Additionally, anecdotes of Attitude such as Fear and Awareness are explained to understand the attitude formation based on the ABC model of attitude formation.

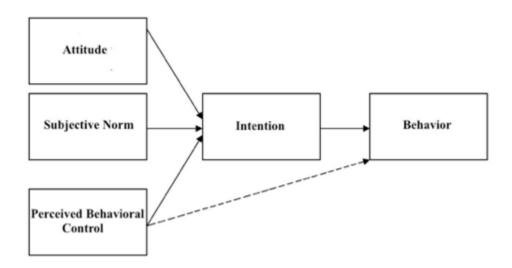


Figure.1
Theory of Planned Behaviour

#### **Attitude**

An attitude is an evaluation of an object of thought and occupies a crucial position in the mental makeup of the individual (Ajzen, 2011). Attitude is determined by beliefs and perceived outcomes of performing a certain behaviour. A relatively stable set of associations based on evaluation, together form an attitude towards an object or an event (Cunningham, Zelazo, Packer, & van Bavel, 2007). Based on these evaluations if a person holds positive beliefs, then positive valued outcomes will result from performing the behaviour, meaning they will have a positive attitude. Conversely, when a person holds beliefs that negatively value the outcome of a certain behaviour then there will be a negative attitude (Ajzen, 2011). The behaviour here refers to taking psychedelics. Attitudes may be formed from memory based summary evaluations that can be retrieved easily, to evaluative judgement based on accessible

information (Harreveld, Nohlen & Schneider, 2015). Therefore, attitude formation and attitude change are a result of evaluation of an object and behaviour (Crano & Prislin 2006, Walther & Langer 2008). Attitudes occupy a crucial position in the mental makeup of the individual and serve as powerful energisers and direct overt behaviour (Crano & Prislin 2006, Walther & Langer 2008). Furthermore, definitions of attitude proposed by Allport suggests that attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related (Allport, 1935), meaning the response is also preceded by a sense of evaluation. Important functions such as preparation and guidance of behaviour is facilitated by evaluation (Katz, 1960). When associations take place in terms of positive and negative, evaluations form quickly and are seemingly effortless guides of human behaviour (Armitage & Conner, 2000). Hence, attitudes are often made up of positive and negative associations. Therefore in the context of this research, the attitude towards psychedelics can be constructed by evaluation of factors such as personal experience, source of information, awareness, fear and other aspects with regards to psychedelic experiences.

# **Subjective Norm**

In TPB, another determinant of behaviour is Subjective Norm, which is an array of normative beliefs, in other words if important referent individuals approve or disapprove of performing that behaviour (Ajzen, 2011). Therefore, a belief that certain referents of importance think positively about the behaviour, then the motivation to comply will result in a positive subjective norm (Ajzen, 2011).. Conversely, if referents of importance have a negative opinion about taking psychedelics, then the motivation to comply will result in a negative subjective norm. In other words, subjective perception about whether peers and people of importance to the person would approve if the person should take psychedelics. In the context of this research, the model aims to establish a relationship between Subjective Norm, and the behavioural component Intention to try psychedelics.

### **Perceived Behavioural Control**

The TPB assumes behavioural intention is the direct determinant of behaviour. Assuming, that performing the behaviour is under complete volitional control, i.e there is a large degree of control over exercising the behaviour. Therefore, the perceived behavioural control is added to the TPB taking into account factors outside of an individual's control that may affect the intentions and behaviours (Ajzen, 1991; Ajzen and Driver, 1991; Ajzen and Madden, 1986). Perceived control is determined by control beliefs concerning the presence or absence of facilitators and barriers to behavioral performance, weighted by their perceived power or the impact of each control factor to facilitate or inhibit the behavior (Ajzen, 1991; Ajzen & Fishbein, 1980). In the context of this research, for convenience sake the influence of the perceived behavioural control is assumed to be a constant. Meaning, there are no factors beyond the control of the individual that would have an influence on the behavioural intention. Due to this assumption, the determinants that will be explored in this research are attitude and subjective norm. Further, the amount at which these two determinants predict the Intention to try will be explored.

### Intention

### **Intention to Try**

According to TPB, Attitude, Subjective Norm and Perceived behavioural control together predict the behavioural intention (Ajzen, 2011). In the context of this study, the Intention is defined by the Intention to try psychedelics based on the Attitude and Subjective norm one has towards psychedelics.

Fear or dislike towards an unfamiliar substance is a personal trait that has a significant effect on the intention to try unfamiliar substances (Aqueveque, 2015). Further, preconceptions arising from cultural

evaluations, standardised customs and level of familiarity have an effect on intention to try unfamiliar substances. This plays an important role in the potential acceptance and adoption of the substance (Aqueveque, 2015). The level of Fear, Awareness, Attitude and the correlation of these variables to each other and Intention try would be explored, along with the effect of Fear and Attitude on it.

As described above, the Attitude towards the context of psychedelics is being measured by understanding the prediction of variables like Awareness, and Fear on it by adapting the ABC model. Furthermore, the Intention to try psychedelics are predicted by exploring the formation of variables such as Subjective Norm and Attitude by adapting the Theory of planned behaviour. Therefore, according to the TPB, the intention to try can predict the attitude one has towards psychedelics, as well.

Additionally, the Intention to seek information about psychedelics is explored in this paper. Considering the Intention to try is influenced by the Attitude, which is predicted by the Awareness one has towards psychedelics, the level of intention to seek information about psychedelics based on these variables will also be explored.

### **Intention to seek information**

In the health sector there is a wide variety of sources of health information to consumers beyond the doctors (Bergman, 2001). Likewise, there is a wide range of access to information from beyond what the mainstream media presents about psychedelics (Feher, 2018). Conceptually an active and autonomous consumer of any substance tends to seek information about a specific situation to satisfy his or her subsequent consumer information needs (Feher, 2018). Consistent with the RISP model, people who were more concerned about the risk and perceived pressures to stay informed about a certain object tend to seek information in order to be able to deal with the risk of the object in concern effectively (Yang, 2014). In this study, the intention to seek information about psychedelics is going to be explored based on the Fear and Attitude the general public has towards psychedelics.

### ABC model

To further explore the attitude and the anecdotes such as Fear, and Awareness on attitude formation about psychedelics, a brief understanding of the ABC model of attitude formation is adapted to the theoretical framework.

ABC model is one of the most cited models of attitude (Eagly & Chaiken 1998) (Van den Berg et al. 2006). According to this model, attitude is made of three distinctive components namely the Affective component, Behavioural component and Cognition component (Eagly & Chaiken 1998). The Affective component denotes the feelings towards an attitude object, in this case the Fear one has towards psychedelics (Schiffman & Kanuk, 2004). As in TPB, the behavioural component denotes the intention towards the attitude object, in this case the intention one has towards taking psychedelics. Lastly, the cognitive component is composed by the Awareness an individual has about an object attitude (Schiffman & Kanuk, 2004).

### **Awareness**

Awareness refers to the knowledge or perception of beliefs an individual has about a certain situation, object or fact (Percy & Rossiter, 1992). In the context of this research, Awareness refers to the knowledge and beliefs a participant has about psychedelics. The information about an event or object perceived and interpreted by an individual, forms the basis for awareness about that event or object (Percy & Rossiter, 1992). The information received by an individual is stored in categorical memories, which are retrieved when a stimulus is presented. Studies suggest that the accessibility of categorical information from memory is based on interpretation and selection of social information (Percy & Rossiter, 1992). It also has been concluded that social stimuli which people are not consciously aware of,

can influence their conscious judgement (Percy & Rossiter, 1992). When information with a negative connotation is presented outside the conscious awareness, the accessibility to that category happens at a faster rate. In other words, people tend to be aware of negative information more easily than the positive information about a certain event or object. Furthermore, research suggests that sources of information, especially mainstream and mass media, have a significant effect on the perceived knowledge of psychedelics, especially when direct personal experience is lacking (Romer, Jamieson, & Aday, 2003; Schnauber & Meltzer, 2005). Therefore, from an exploratory perspective, the effect of source of information and personal experience on Awareness will be investigated.

### Fear

In the proposed model the fear variable is part of the affective component of the adapted ABC model. Fear is an emotion that is induced towards an attitude object due to a perceived threat or risk that is based on familiarity (Ohman, 1993), which is further based on what the individual perceives from the information that forms the knowledge. Broadly speaking there can be two types of fear, innate fear which refers to the tendency to fear and learned fear refers to the development of fears as a result of conditioning and learning (Garcia, 2017). The learning involved in conditioned fear including the neurobiology changes exponentially from infancy, across childhood and adolescence, into adulthood and aging. Infants show a slower ability to develop fear associations, whereas their adult counterparts develop fear associations at a much faster rate (Pattwell, Duhoux, Hartley, Johnson, Jing, Elliott, & Soliman, 2012). Furthermore, Fear is a tendency that leads to evaluative deviations from familiarity, only when the focus due to uncertainty is the worst case scenario (Cao, Hirshleifer & Zhang, 2003). In the context of psychedelics the worst case scenario can be viewed as having a bad trip, experiencing psychosis. prosecution, or other negative associations formed about psychedelics either based on information gained about or personal experiences with them (Byok, 2018). In this paper, the level of Fear towards psychedelics predicted by the source of information, personal experience, and awareness is going to be measured. Further, the correlation between Fear and Attitude will be measured and the effect of Fear on Intention to try and seek information will be explored.

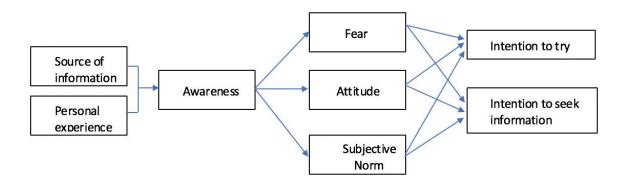


Figure 2. Conceptual Model

# **Conceptual Model**

From the conceptual model depicted in Figure.2 above and the theoretical framework described, the following hypothesis can be derived.

**Main Hypothesis**: Fear, Attitude and Subjective Norm have an influence on Intention to try psychedelics and Intention to seek information about psychedelics.

H1a: Fear has a negative effect on intention to try psychedelics while Attitude and Subjective Norm have a positive effect on intention to try psychedelics.

### **Additional Exploratory Research Questions**

- A. Fear has a negative effect on Intention to seek information, while subjective norm and attitude have a positive effect on intention to seek information.
- B. The source of perceived information about psychedelics indicators in predicting the awareness and attitude one has about psychedelics.
- C. There is a significant difference between fear, awareness, attitude, intention to try, intention to seek information and subjective norm between people who have taken psychedelics and not taken psychedelics.
- D. For the people who have taken psychedelics, the nature of the experience and the privateness of the setting under which they took psychedelics would have an influence on awareness, attitude and fear.

### Method

# Design

An online survey study is used to measure Awareness, Familiarity, Fear, Intention to try, Intention to seek information and attitude towards psychedelics. Further, the questions will also measure indicating factors like subjective norm, source of information and personal experiences. Then a regression analysis is going to be made to estimate the relationship between the given concepts. In order to ensure that the participants took the study voluntarily, they had to agree to the informed consent given prior to the survey itself. Participants responded to 59 questions involving the different variables.

### **Participants**

Overall, 378 participants participated in the survey. Nevertheless, 91 participants had to be excluded due to not responding to all or few of the questions after agreeing to the consent form. Hence, no data was available from these participants.

As seen in the Table.1 below, the final sample, therefore, consisted out of 287 participants, with the average age of 28.5 (min. 18, max. 65). Partly, 41 undergraduate psychology students at the University of Twente received a sona credit for participating in the study. The survey has been answered by 23 different nationalities, the majority were Dutch with a quantity of 88, followed by 57 Indian participants, 53 participants from Germany, and 30 participants from the USA, followed by the rest of the participants who indicated other nationalities.

Table 1 Demographic Characteristics of the Respondents (N=284)

Variables	Frequency	%
Gender		
Male	100	35.9
Female	177	63.6
Other	6	2.1

Nationality			
Dutch	88	30.6	
Indian	57	21.6	
German	53	3.6	
USA	30	14.4	
Other	56	19.7	

#### **Procedure**

The participants were introduced to the research on the qualtrics platform using social media for the first 337 participants and then the SONA platform for the remaining 41. On the SONA platform, the survey was shown under the name "Measuring the attitude of the general public towards psychedelics and its uses" and 0.25 SONA points were offered as reward for participating in the survey. As social media devices, facebook, and whatsapp were used to publish the link of the qualtrics survey. When the participants clicked on the link, either using their smartphone or their laptop, the online survey started by showing the informed consent form.

The consent form informed the participants about a very brief overview of the research, the procedure of the survey, the validity of the data, and their rights to withdraw the survey at any time without giving any reason. The questionnaire was organised along 4 thematic blocks that followed each other as soon as the respondents clicked on the arrow at the end of each survey page..

The first block consisted of the consent form and only when the participants clicked on 'Yes, go ahead' and then clicked on the arrow key.

The second thematic blog investigated the different variables in order of appearance; awareness, familiarity, fear, tendency to try, tendency to seek information, source of information, Subjective norm and attitude. Thus, participants were asked to indicate to what extent they agree with a certain statement regarding the way they feel about the different items that constructed these variables. The next block consisted of only one Item "I have taken psychedelics", with just a Yes or No as option, which was designed to assess the personal experience the participant had or not with psychedelics. Followed by this block, the next block was a conditional block, in other words a different set of questions would be presented if a participant chose yes in the previous block, and a different set if the participant chose No. The two conditional blocks consisted of questions to further investigate the personal experience of the participants. The last block participants were asked to fill out a demographic questionnaire in which the respondents were supposed to answer general questions about themselves including their gender, nationality and age. In addition, the participants were given the chance to contact the researcher in case they would like to receive further information about the research and the outcome of the survey.

#### **Materials**

### **Demographics**

Primarily, the demographic information of participants was collected, by assessing their age, sex and nationality, [3 questions].

### **Awareness**

This part of the survey measured the awareness the general population has about psychedelics. Questions that measured their perceived knowledge about psychedelics were asked according to the specific aspects that could support the scoring of this variable. A randomised 7 point Likert scale ranging from "strongly disagree" to "strongly agree" [6 items, eg.: "I am certain about what psychedelics are." and "Set and Setting is the most important aspect of a psychedelic experience."]. The scale also displayed an

acceptable internal consistency with Cronbach's alpha being .75.

### **Familiarity**

This part of the survey measured the Familiarity the general population has with psychedelics. Questions that measured their perceived familiarity about psychedelics were asked according to the specific aspects that could support the scoring of this variable. A randomised 7 point Likert scale ranging from "strongly disagree" to "strongly agree" [4 items, eg.: "I often talk about psychedelics to my friends and family." and "There is sufficient information about psychedelics."]. The scale displayed an unacceptable internal consistency with Cronbach's alpha being .24. Therefore, following this the variable familiarity was dropped for the rest of the course of this research.

### **Fear**

This part of the survey measured the Fear the general population has towards psychedelics. Questions that measured their perceived fear towards psychedelics were asked according to the specific aspects that could support the scoring of this variable. A randomised 7 point Likert scale ranging from "strongly disagree" to "strongly agree" [6 items, eg.: "The thought of taking psychedelics is something that frightens me" and "I am afraid if I take psychedelics I will have a bad trip."]. The scale displayed a good internal consistency with Cronbach's alpha being .80.

### **Intention to Try**

This part of the survey measured the Intention to try the general population has towards taking psychedelics. Questions that measured their perceived intention to try psychedelics were asked according to the specific aspects that could support the scoring of this variable. A randomised 7 point Likert scale ranging from "strongly disagree" to "strongly agree" [4 items, eg.: "I will take psychedelics by myself." and "I will never take psychedelics."]. The scale displayed a very good internal consistency with Cronbach's alpha being .88.

# **Intention to Seek Information**

This part of the survey measured the Intention to seek information about the psychedelics amongst the general population. Questions that measured their perceived intention to seek information about psychedelics were asked according to the specific aspects that could support the scoring of this variable. A randomised 7 point Likert scale ranging from "strongly disagree" to "strongly agree"[3 items, eg.: "I would like to watch documentaries about psychedelics"]. The scale displayed an acceptable internal consistency with Cronbach's alpha being .75.

# **Personal Experience**

This part of the survey measured the Personal experience with psychedelics amongst the general population. Questions that measured their level of personal experience with psychedelics were asked according to the specific aspects that could support the scoring of this variable. The first question was a closed question, "I have taken psychedelics" with answer options being "YES" and "NO". Depending on the answer of the question the participants were asked 6 items each. For people who said yes a randomised 7 point Likert scale ranging from "strongly disagree" to "strongly agree" [6 items, eg.: "I had a good trip" and "I took it in a private environment"]. And for the people who said no [6 items. Eg: "I know someone who had a psychedelic experience" and "That person had a bad experience".] The scale displayed an unacceptable internal consistency with Cronbach's alpha being .38. Hence as a variable Personal experience was rejected, but instead, the scores of "I had a good trip" and "I took it in a private environment" were used as separate indicating aspects. Further, the "I have taken psychedelics" was used as a demographic variable which would classify people who have taken psychedelics and not.

### **Source of Information**

This part of the survey was aimed at measuring the source from which the general public acquired their knowledge about psychedelics. A randomised likert scale ranging from "strongly disagree" to "strongly agree" with 3 items which specifically measured was aimed at measuring the score of participants on the specific source. [3 items, eg: "I heard of psychedelics from my friends" and "I know of psychedelics from the media"]

### Attitude

This part of the survey measured the Attitude the general population has towards psychedelics. Questions that measured their perceived Attitude towards psychedelics were asked according to the specific aspects that could support the scoring of this variable. A randomised 7 point Likert scale ranging from "strongly disagree" to "strongly agree" [17 items, eg.: "The topic of psychedelics is very interesting" and "People should be educated about psychedelics and its uses"]. The scale displayed a very good internal consistency with Cronbach's alpha being .85.

### **Subjective Norm**

This part of the survey measured the Subjective norm of the general population regarding psychedelics. Questions that measured their perceived subjective norm towards psychedelics were asked according to the specific aspects that could support the scoring of this variable. A randomised 7 point Likert scale ranging from "strongly disagree" to "strongly agree" [4 items, eg.: "My family and friends will approve if I took psychedelics" and "I will not tell my family and friends if I took psychedelics"]. The scale displayed a poor but acceptable internal consistency with Cronbach's alpha being .62.

# Data analysis

The data obtained with the survey was analysed using the program IBM SPSS statistics 25. First, data that did not fulfil the inclusion criteria was deleted. Out of the 400 participants who took part in the study, 116 of them had to be excluded, as the participants had quit the questionnaire without completing it. There were three missing values for three items in the data set, hence an imputation was conducted and the median value for those items was added to the missing values. A reliability test for all the variables was conducted and the Cronbach's alphas were measured for each. Familiarity, Source of Experience and Personal experience had below acceptable level of reliability, due to which the variables were rejected. The reliability for the subjective norm was 0.61, which was just above the acceptable threshold but still poor validity. The rest of the variables Awareness, Fear, Intention to try, and seek information had Cronbach's alpha ranging from 0.70 to 0.88, hence had moderate to good reliability.

To be able to answer the hypothesis H1a, regression analysis was conducted. Intention to try and Intention to seek information were dependent variables in the regression analysis respectively. Further, to answer the explorative questions A, B, and D regression analysis with three items as dependent variables was conducted to measure their effect on awareness, attitude and fear.

Although to answer the question C, a t-test on the item, "I have taken psychedelics" was conducted and the difference in scores between the participants who had taken psychedelics and not taken psychedelics was measured. The alpha significance level for this study is chosen to be 0.05. A significance level of 0.001 to 0.05 is considered to be sufficiently significant.

### **Results**

# **Descriptives and correlations**

In order to assess the extent to which each of the accepted variables correlate with each other, the Pearson correlation was calculated using SPSS.

As shown in *Table.2* below, there was a negative correlation between fear and Attitude, Intention to try, Intention to seek information, Awareness and Subjective norm at significance of p < .001. There was a positive correlation between the variables attitude, intention to try, intention to seek information at significance level of p < .01, awareness, and subjective norm at significance of p < .001.

Table 2 Descriptives and Pearson's correlation coefficients (N=284)

Variable	M	SD	1	2	3	4	5	6
1. Fear	4.351	1.312	1					
2. Attitude	2.713	0.773	672**	1				
3. Intention to try	2.740	1.613	681**	.772**	1			
4. Intention to seek information	2.691	1.282	234**	.520**	.459**	1		
5. Awareness	2.724	0.900	550**	.645**	.617**	.373**	1	
6. Subjective Norm	3.287	1.073	506**	.525**	.478**	.184**	.465**	1

### **Regression Analysis**

# **Primary Analysis**

### **Intention to try**

The effect of independent variables Fear, attitude and Subjective norm on the variable Intention to try was measured using a hierarchical linear regression.

Table 3
Regression 1: Dependent variable: Intention to try; Predictors: Fear, Awareness, Subjective Norm, Attitude

Scale	Beta	df	F	t	p<
Intention to try*		4	133.76		.0003
Predictors					
1. Fear	25			-8.05	.000
2. Subjective Norm	.02			2.07	.636
3. Attitude	.49			9.14	.000

<sup>\*\*.</sup> *Correlation is significant at the 0.01 level* (2-tailed)

As seen above in Table 3, the regression model had a good fit (F(4,280) = 133.760, p < .001). The higher the Fear, lower the Intention to Try psychedelics. Based on the results of this regression analysis hypothesis, **H1a** is partially accepted, as Attitude has a positive effect on Intention to try while Subjective norm does not have a significant effect on the intention to try.

Further, to measure the effect of Personal experience on Intention to Try a t-test and ANOVA was conducted on the item "I have taken psychedelics", and the corresponding levels of Intention to try was measured. The participants that answered Yes scored (M = 1.8779; N = 174; SD = .896; p < .01) lower than the ones who said No (M = 4.104; M = 110 M = 1.556; M = 1.55

# **Secondary Analysis**

### **Intention to seek information**

The effect of independent variables Fear, Attitude and Subjective norm on the variable, intention to seek information was measured using a hierarchical linear regression.

Table 4
Regression 2: Dependent variable: Intention to seek information; Predictors: Fear, Awareness, Subjective Norm, Attitude

Scale	Beta	df	F	t	p<
Intention to seek		4	31.04		.000
information*					
Predictors					
1. Fear	21			2.98	.003
2. Subjective Norm	10			-1.64	.100
3. Attitude	.63			8.21	.000

As seen below in Table 4, the regression model had a good fit (F(4,279) = 31.0493, p < .001). Higher the Fear, lower the Intention to seek information. Therefore based on the results of this regression analysis the additional exploratory research question **A** is partially answered. Attitude has a positive effect while subjective norm had no significant effect on Intention to seek information.

Further, to measure the effect of Personal experience on Intention to seek information a t-test and ANOVA was conducted on the item "I have taken psychedelics", and the corresponding levels of Intention to seek information was measured. The participants that answered Yes scored (M = 2.3369; N = 174; SD = 1.081; p < .01) lower than the ones who said No (M = 3.2516; N = 110 M = 1.377; M = 1.081; M = 1.

### **Attitude**

The effect of three items "I heard of psychedelics from my friends" (Friends), "I know of psychedelics from the media" (Media) and "I learnt of psychedelics through scientific research" (science) on Attitude was measured using linear regression.

Table 5
Regression 3: Dependent variable: Attitude; Predictors: Media,
Friends. Scientific Research

1 rienas, Scientific Research							
Scale	Beta	df	F	t	p<		
Attitude*		3	17.74		.001		
Predictors							
1. Friends	.2			5.6	.001		
2. Media	07			-2.1	.001		

### 3. Science .14 4.4 .001

As seen above in Table 5, the higher the score on Media the more negative the Attitude towards psychedelics, thus partially answering the exploratory question **B**.

The effect of two items "I had a great trip (good experience" (Good Trip), and "I took it in a private environment" (set and setting) on Attitude was measured using linear regression. As seen from the below Table 6, Higher the score on Good Experience and Set and Setting, higher the score on Attitude hence partially answering the question **D**.

Table 6
Regression 4: Dependent variable: Attitude; Predictors: Good experience, Set and setting.

circi serring.	1	1	1		
Scale	Beta	df	F	t	p<
Attitude*		2	16.788		.001
Predictors					
1. Good experience	.23			5.4	.001
2. Set and setting	.03			1.0	.001

Further, to measure the effect of Personal experience on Attitude a t-test and ANOVA was conducted on the item "I have taken psychedelics", and the corresponding levels of attitude was measured. The participants that answered Yes scored (M = 2.3493; N = 174 SD = .548; p < .01) had lower Attitude from the ones who said No (M = 2.2904; N = 110 SD = .726; P < .01), therefore partially answering  $\mathbb{C}$ .

### **Awareness**

The effect of three items "I heard of psychedelics from my friends" (Friends), "I know of psychedelics from the media" (Media) and "I learnt of psychedelics through scientific research" (science) on Awareness was measured using linear regression.

Regression 3: Dependent variable: Awareness; Predictors: Media, Friends, Scientific Research

Scale	Beta	df	F	t	p<
Awareness*		3	16.35		.001
Predictors					
1. Friends	.14			4.47	.001
2. Media	07			-2.38	.001
3. Science	.16			5.51	.001

As seen above in Table 7, the higher the score on Media the more lesser the Awareness about psychedelics, thus partially answering the exploratory question  ${\bf B}$ .

The effect of two items "I had a great trip (good experience" (Good Trip), and "I took it in a private environment" (set and setting) on Awareness was measured using linear regression. As seen from the below Table 8, Higher the score on Good Experience and Set and Setting, higher the score on Awareness hence partially answering **D**.

Table 8
Regression 4: Dependent variable: Awareness; Predictors: Good experience, Set and setting.

Scale	Beta	df	F	t	p<
Awareness*		2	10.22		.001
Predictors					
1. Good experience	.16			3.49	.001
2. Set and setting	.07			2.14	.001

Further, to measure the effect of Personal experience on Attitude a t-test and ANOVA was conducted on the item "I have taken psychedelics", and the corresponding levels of Awareness was measured. The participants that answered Yes scored (M=2,315; N=174; SD=.690; p<.01) lower from the ones who said No (M=3.699; N=110 SD=.813; p<.01), therefore partially answering **C**. **Fear** 

The effect of two items "I had a great trip (good experience" (Good Trip), and "I took it in a private environment" (set and setting) on fear was measured using linear regression. As seen from the Table 6 below, Good experience and Set and setting have a negative effect on fear, therefore, partially accepting **D**.

Table 9
Regression 7: Dependent variable: Fear; Predictors: Good Trip, Set and setting.

Scale	Beta	df	F	t	p<
Fear*		2	13.23		.001
Predictors					
1. Good experience	21			-4.61	.001
2. Set and setting	04			-1.34	.05

Further, to measure the effect of Personal experience on Fear a t-test and ANOVA was conducted on the item "I have taken psychedelics", and the corresponding levels of Fear was measured. The participants that answered Yes scored (M = 4.9828, N = 174, SD = 0.9887, p < .01) higher than the ones who said No (M = 3.353, N = 110, SD = 3.353, p < .01), therefore partially satisfying  $\mathbb{C}$ .

### **Discussion**

The present study was conducted to observe the attitude amongst the general public towards psychedelics and its uses, based on awareness, familiarity, subjective norm and fear for the substance. The study also aimed to measure how these variables influence the intention to try psychedelics and seek information about psychedelics. Additionally, from an exploratory perspective, the influences of additional variables such as personal experiences with psychedelics and source of information on awareness, fear and attitude was investigated. A quantitative analysis of the relationship between the variables was conducted and one main hypothesis was explored.

The first hypothesis tested the effect of Fear, Attitude and Subjective norm about psychedelics on the Intention to try psychedelics. This was supported by regression analysis which showed a significant causal relationship between Fear, Attitude and intention to try. However, there was no significant causality between Subjective Norm and Intention to try. Based on the results of the analysis, the higher Fear about psychedelics the lower Intention to try. Furthermore, there was a negative correlation between Fear and Attitude. This supports theoretical research that states fear arousal can influence Attitude formation, which further influences information processing style in the context of Fear (Nabi, 2002), and the level of Fear has a negative effect on intention (Aqueveque, 2015). Therefore, standing in line with

previous findings, there is a negative attitude towards psychedelics based on fear which could also be moderated by cultural and legal contexts (Feher, 2018). Previous research states that the prevalence of unclear information about psychedelics indeed tends to cultivate a negative attitude towards psychedelics, further inhibiting the Intention to try or Intention to seek information regarding the substances itself (Feher, 2018). Additionally, results of B showed that information from the media has a negative effect on awareness about psychedelics and attitude towards psychedelics. Previous findings reveal that the coverage of controversial societal issues like psychedelics helps in shaping the perception and public opinion towards the topic (Forsyth, 2001; Körner & Treloar, 2004). Further supported by research which suggests that the mass media fuels a negative opinion, while it neglects to report scientific advances regarding psychedelics, resulting in a low awareness and negative attitude towards psychedelics (Feher, 2018). To a certain extent this could explain the lack of awareness and negative attitudes towards psychedelics amongst the general public. It can be argued that this negative attitude could be fueled by the lack of scientific information in mainstream media about psychedelics (Feher, 2018) and that in many countries it is still illegal. Therefore, the fear that stems from unfamiliarity (Cao, Hirshleifer & Zhang, 2003) and the fear of crime (Dowler, 2003) had a significant effect on Attitude towards psychedelics and thus on Intention to try or seek information about psychedelics (Feher, 2018). In other words this could mean that, when people do not have sufficient information about psychedelics, and have the fear of being persecuted due to the legal contexts, their intention to try psychedelics would be lower. Therefore, extensive research is needed to provide deeper insights into how the prevailing narrative with regard to psychedelics and prohibition policies against psychedelics affects public opinion on psychedelics. Further it is also advised to explore the prevalent values and morals against drug consumption that could also be a factor in understanding the attitude and intention towards psychedelics.

In this study, as a part of the additional exploratory questions, the Personal experience with psychedelics was expected to be a significant factor in predicting the levels of Fear, Attitude and Intention to try psychedelics. Research in the field of communication science showed, that a person's Source of information on psychedelics is only meaningful as a predictor variable of fear, intention and attitude, when direct personal experience is lacking (Romer, Jamieson, & Aday, 2003; Schnauber & Meltzer, 2005). Thus, participants with previous experience were expected to have significantly different levels in these variables than the ones without; C. The results of the analysis partially answered this question, as the variable scores revealed significant differences between the people who claimed to have previous experiences with psychedelics and the ones who did not. However, the results were counterintuitive, as people with previous experience scored higher on Fear, and lower on Attitude and Intention to try psychedelics. Previous data suggests that changes of personality have been correlated with the use of psychedelics, including increase in critical thinking, which enables users to mindfully assess information, as opposed to merely accepting information that is presented to them (Nour, Evans, & Carhart-Harris, 2017). This could partially explain the counterintuitive results, as the participants with previous experience may have tried not to sound too biased in their responses. It is also possible that the previous experiences were not satisfactorily positive or the participants had too high expectations before the experience. Additionally, the participants who had taken psychedelics and claimed to have a good experience, still scored low in the Intention to try. This can be explained by previous research which states the non addictive nature of psychedelics, in other words even if the experience evoked a positive attitude towards the substance, the innate need to do it again is lacking (Winkelma, 2014). This results also points in a direction that is opposite to that of the theory of planned behaviour according to which a positive attitude should increase the intention towards that action. In other words when a person has a

positive association with a certain behaviour, especially after performing the behaviour, the person would hold positive beliefs about the behaviour. This would lead to a positive attitude towards performing the behaviour, therefore increasing the intention towards performing the behaviour (Cunningham, Zelazo, Packer, & van Bavel, 2007). On the contrary, the results of this analysis shows that even though the people with experience reported they had a good experience, still had a lower level of intention to try again. Therefore, as an extension of this study, it is suggested to do a qualitative interview study with people who have previously taken psychedelics, to get a deeper insight into the cognitive capacities and explore possible counterintuitive thought processes in them. This would be able to shed more light on the process of the psychedelic experience itself and understand the cognitive processes which follow the experience.

Data analysis of **D** shows significant effects of aspects such as Set and Setting and Good experience on the awareness and fear towards psychedelics. This supports previous findings which states that the set and setting affects an individuals experiences with psychedelics, which further incorporates their awareness, attitude and fear of the substance (McElrath & McEvoy, 2011). The data also supports other findings which suggest that the enjoyment of the experience induced a favourable attitude towards psychedelics (McElrath & McEvoy, 2011). Furthermore, this underpins research which also suggests that the more positive the experience the higher the sustained wellbeing of the user (Ross, 2018). In other words depending on pleasure of the past experience, the fear towards psychedelics reduces while the awareness about it increases, therefore, supported by the results of the question D. However, it is difficult to pinpoint exactly how the nature of the experience and the setting has an influence on the awareness based on the results of this study. Hence, it is recommended to measure this in a repeated measure study design, that could measure the awareness about psychedelics before and after a specific psychedelic experience.

Additionally, awareness has a positive correlation with attitude and intention to try, underpinning that the more knowledge perceived about psychedelics the more positive the attitude towards psychedelics and the intention to try it (Feher, 2018).

Lastly, an additional regression analysis shows attitude has a positive effect on intention to seek information. This supports the theory of planned behaviour which states that the intention is influenced by the attitude one possesses about the action (Ajzen, 1991; Ajzen and Driver, 1991; Ajzen and Madden, 1986).

### Limitations

It is necessary to mention that the present study is only an early step towards providing an understanding of people's attitudes towards psychedelics and its uses, taking the variables of fear, awareness, familiarity, intention and subjective norm for the substance into focus. Due to the limited time-frame within which the study was conducted, a suggestion for future research is therefore, to conduct more in depth research on the individual variables coming into play in the formation of the general public's attitudes. Next to this, although the survey had an acceptable internal validity, the sample has limited generalizability as the data was obtained through convenience sampling. Due to error in scale construction the reliability of certain variables are low and have an influence on the analysis.

Firstly, there was no significance found in the regression analysis to suggest that subjective norm has an effect on intention to try and seek information. One of the reasons for this could be due to the low reliability of the variable, subjective norm. Therefore, for future research it is advisable to reconstruct the variable using a more reliable scale construction. Furthermore, the results also showed that the participants with previous experience scored lower on the variable; subjective norm, in comparison to the

ones who had not tried psychedelics. This provides a counterintuitive foundation to further explore how experience with psychedelics influences the need for social acceptance amongst users.

Further, familiarity showed unacceptable reliability, due to poor scale construction, therefore the variable had to be dropped from the conceptual model. Therefore, future research should take more indepth literature into account, especially since the subjective norm is a dynamic variable. As there was a technical error in the qualtrics survey, a personal experience variable was not created, based on the 6 subquestions per yes and no option to the question whether psychedelics had been tried by the participant. A preliminary analysis was run with 2 of the sub-questions for the yes option. Although these results were significant, the personal experience of participants could only be used as an indicator for how the results were scattered, not as a predictor variable. Similarly, due to a construction error, the Source of Experience variable was not created based on the 3 sub-questions forming the variable. Although, the three items were used as separate factors which recognised where the participants had received their information about psychedelics from, namely, media, friends and scientific research. Furthermore, the measurement validity of Source of information and personal experience with psychedelics has not been validated with other studies or samples, implying that the findings of this study even if significant should be interpreted with caution and need further replication. Lastly, this research does not explore the role of perceived control behaviour and assumes it to be a constant. This could be a very crucial variable to explore in understanding the intention and attitude towards psychedelics.

Finally, the vastness of the topic in research, a quantitative analysis makes this research unidirectional, and in order to understand the depths of insights an extensive combination of qualitative and quantitative will be required.

### Conclusion

The premise of this study happens at a time in history, where psychedelic substances after being inadequately presented for close to 60 years, are going through scientific facelift where scientists from around the world are studying their effects on a range of hard to treat psychological problems. The results of this study provide an insight into how the prevailing narratives around psychedelics affect the public opinion. Further, two thirds of the participants in the study claimed to have taken psychedelics before, even though the majority of them were from countries where all kinds of psychedelics are illegal, clearly indicating a strong prevalence amongst the general public. However, there is still a presence of fear towards psychedelics even people who have taken psychedelics, had a good experience and have a positive attitude. The nature of this fear is still unknown, creating substantial grounds for research to get a deeper understanding of it. The present study gives an overview of the prevalence of psychedelic use amongst the general public and the relevant attitude towards it. The results of this study provides substantial evidence to support the need for multidimensional research in the field of psychedelics, to get a clearer understanding of its effects on the building blocks of psychological functioning. Therefore the vision of this study is to foster an inclusive and critical dialogue where relevant risks and uses of psychedelics can be addressed with an approach that is more contemporary in order to open a whole new dimension in understanding and treating mental health. In conclusion it is suggested that rigorous research is warranted to get a better understanding about psychedelics with the ultimate goal of taking full advantage of their potential.

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### **APPENDIX**

### **Questionnaire**

Scale:

Strongly Agree = 7

Strongly Disagree = 1

- 1. Awareness
- 1. I am certain about what psychedelics are (awareness)
- 2. I am uncertain about the different types of psychedelics (Awareness)
- 3. I think psychedelics are just recreational drugs people take to get high
- 4. Set and setting is most important for experiencing psychedelics
- 5. Psychedelics have been used by some therapists around the world to help cancer recovered patients
- 6. To be honest I have never heard of psychedelics

### 2. Familiarity

- 7. I have never really heard or talked about psychedelics (familiarity)
- 8. I often talk about psychedelics to my friends and family
- 9. I have been a lot about psychedelics
- 10. There is sufficient information about psychedelics

### 3. Fear

- 11. The thought of taking psychedelics is something that frightens me (fear)
- 12. I am afraid if I take psychedelics I will have a bad trip
- 13. I am afraid I could get addicted to psychedelics
- 14. Psychedelics can induce serious psychological damage
- 15. I do not use psychedelics because it is illegal

# 4. Tendency To try

- 16. I consider trying psychedelics at some point in my life.
- 17. I would be willing to take psychedelics if my therapist prescribed it to me
- 18. I will take psychedelics by myself

### 5. Seek information

- 19. I want to find out more information to form a clearer opinion about psychedelics
- 20. I would like to watch documentaries about psychedelics
- 21. I would attend seminars about psychedelics if given the access to find them
- 22. I will never take psychedelics (Strongly agree = 1. Strongly disagree = 7) (this has to be in Tendency to try)
- 23. Psychedelics could induce permanent psychosis (Fear Item)

### 5. Source of information

- 24. I heard about psychedelics from my friends
- 25. I know of psychedelics from the media
- 26. I learnt about psychedelics from scientific research

### 6. Subjective Norm

- 27. My friends are always talking about trying psychedelics
- 28. None of my peers have ever tried psychedelics
- 29. My family and friends will not approve of me using psychedelics
- 30. I will not tell my friends if I ever took psychedelics

### 7. Attitude

- 31. People should be educated about psychedelics and its uses
- 32. The media should present scientific and non biased evidence about psychedelics.
- 33. The topic of psychedelics is very interesting
- 34. People who take psychedelics need to be taken to rehab (Strongly agree = 1. Strongly disagree = 7)
- 35. People do not want to take psychedelics because they are afraid of having a bad trip
- 36. People who take psychedelics are hippies (Strongly agree = 1. Strongly disagree = 7)
- 37. Use of psychedelics need to be controlled as it can be harmful for the society. (Strongly agree = 1. Strongly disagree =7)
- 38. People should be stopped from using psychedelics as it can lead to chromosome and genetic damage. (Strongly agree = 1. Strongly disagree = 7)
- 39. Therapists and psychologists must explore the use of psychedelics in therapy.
- 40. I should use psychedelics as it can be good for me
- 41. Psychedelics should be banned in all the countries, just like drugs such as cocaine, heroin etc (Strongly agree = 1. Strongly disagree =7)
- 42. Regulated use of psychedelics should be made legal.
- 43. People with mental disorders should use psychedelics, under supervision of their therapist.
- 44. Most of my friends should try psychedelics as it could be helpful to them.
- 45. There should be enough information and guidance on how psychedelics can be useful safely in a recreational context
- 46. The importance of Set and setting should be made clear to the ones wanting to try psychedelics
- 47. Psychedelic substances should not be put in the same bracket as other drugs such as cocaine, heroin and crack (Strongly agree = 1. Strongly disagree = 7)

# 8. Personal Experience

1. I have taken Psychedelics

### YES

1. I took psychedelics only one time.

- 2. I know exactly what I was taking.
- 3. I had a great trip ( A really good experience)
- 4. I had a bad trip (Not a good experience)
- 5. I took it in a private environment. (With friends or family, indoors, etc)
- 6. I took it in a public environment. (Festival, party, with people I did not know, etc)
- 7. I think psychedelics have a positive impact on my life.
- 8. I take psychedelics often.

### NO

- 1. I know someone who has taken psychedelics
- 2. My friend or someone close to me has taken psychedelics.
- 3. The person I know who took psychedelics had a really good experience.
- 4. The person I know who took psychedelics had a really bad experience.
- 5. I am afraid to try psychedelics.
- 6. I do not know what happens when someone takes psychedelics.