Research report



Ecstasy (MDMA): A rebellion coherent with the system

Nordic Studies on Alcohol and Drugs 2021, Vol. 38(1) 89-102 © The Author(s) 2020 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/1455072520954329 journals.sagepub.com/home/nad



José Manuel García-Montes 💿

University of Almería, Almería, Spain

Marino Pérez-Álvarez

University of Oviedo, Oviedo, Spain

Miguel Angel Sánchez-Moya University of Almería, Almería, Spain

José Alberto Carmona Torres University of Almería, Almería, Spain

David F. Carreno University of Almería, Almería, Spain

Salvador Perona Garcelán

Andalusian Health Service, Sevilla, Spain

Laura del Carmen Sánchez-Sánchez University of Granada, Granada, Spain

Abstract

Aim: This study attempts to demonstrate the relevance of the socio-cultural model of drugs in explaining the impressive development of ecstasy in the last 45 years. Method: First the study describes the use of ecstasy by groups which have left their imprint on the substance: university students, gays, yuppies and the "New Age" movement. Then the link between ecstasy and techno music led to the socially integrated "club" phenomenon, and the "rave", which began as a rupturing, nonconformist phenomenon. Findings: According to this argument, in spite of its clearly counterculture beginnings, the "rave" movement and its most characteristic drug, ecstasy, have gradually become integrated into mainstream culture, somehow reinforcing the functioning of capitalist postmodernity. Our study explains ecstasy's history in reference to the cultural contradictions of capitalism and the functions that it currently fulfils for young people. Based on this analysis, the implications of the cultural perspective are discussed as a paradigm of research in drug use, stressing notions of subculture, myths and rituals. It also proposes a harmonious articulation of academic and common knowledge as the most appropriate method for their study. Conclusion: A cultural approach to drug use could assist in unblocking a field so in need of conceptual and empirical revision.

Submitted: 26 February 2020; accepted: 27 July 2020

Corresponding author:

José Manuel García Montes, Universidad de Almería, Carretera de Sacramento s/n. 04120-Almería, Spain. Email: jgmontes@ual.es



open-access-at-sage).

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/ by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/

Keywords

cultural approach, drugs, ecstasy, raves, subculture

Toward a socio-cultural perspective of ecstasy

In any discussion of why people take drugs and become addicted, there are many different and even contradictory views. Doubtless, one of the most common and generalised in research on the subject is the "bio-behavioural" perspective (e.g., Cadet, 2019; Duka et al., 2007; Pomerleau & Pomerleau, 1988). This perspective has the advantage of fitting well with a diversity of research programmes. Drug use can thus be explained by psychological processes (positive operant reinforcement, respondent reinforcement, etc.) which have their ultimate cause in brain functioning. Furthermore, this paradigm also deals with the effects drug use has on certain psychological processes (memory, learning, motivation, etc.) or directly on the brain. This approach to drug research harmoniously integrates psychology and neuroscience, while enabling the study of drugs and addiction in animals in parallel to humans. However, in spite of its undeniable advantages, this approach to drugs and addictions also has certain drawbacks. Thus, the bio-behavioural explanation prioritises individualistic views and underestimates the importance of social and cultural factors. As explained by Orford (2013)

 \dots because they focus on the "interiority" of people's minds and brain processes they can be used $[\dots]$ to locate responsibility and blame onto individuals, in the process distracting attention from the social settings and social structures which provide the contexts for addiction. (Orford, 2013, p. 48)

The socio-cultural perspective appears as an alternative to the abstract, decontextualised extrapolations derived from the biobehavioural model. As shown by Apud and Romaní (2016), this socio-cultural perspective could go back to the 1930s studies by Weston La Barre on the ritual function of peyote among Native Americans (La Barre, 2012). Another remote influence may be found in the qualitative sociology of the Chicago School, pioneer in urban ethnographic studies of the use of opium in the 1930s, under the general idea that the urban context produced a social medium of adverse conditions that impacted indirectly on substance abuse (Apud & Romaní, 2016). In the mid-20th century, interest began in the relationship between hallucinogens and culture, and several studies were carried out on the use of psychoactive drugs in traditional societies (e.g., Levi-Strauss, 2009). In the same decade, Howard S. Becker, based on in-depth interviews with marihuana users, emphasised the importance of socialisation in the substance before they are finally able to build up a drug habit (Becker, 1953). The psychedelic explosion in the mid-sixties demonstrated the clear association between drugs and culture. Beyond the undeniable link between LSD and the hippie movement (Haer, 1969), Becker (1967) analysed psychoses caused by this substance, interpreting them as extreme anxiety reactions to the subjective effects of the drug in individuals who had not been socialised in it or who were not in a context that enabled alternatives to the biomedical explanations. As early as the seventies, Room (1976) emphasised the importance of analysing conflictive norms and values in understanding the problem of alcohol in the United States. In the eighties, Stephens (1985) called attention to the importance of lifestyle in understanding heroin addiction. Thus, chronic use of heroin could be understood as a commitment by the user to a well-defined lifestyle which offers the addict meaningful social and personal rewards.

In this light, the minority socio-cultural perspective argues that drug experience has as much to do with perception, culture and subculture as it has with the pharmacological properties of drugs (Milhet et al., 2011).

This article reviews work from different disciplines to explain the role of culture in the use of drugs and addictions, taking ecstasy as a paradigmatic case. It might be said that it follows a "grounded theory" methodology (Glaser & Strauss, 1967; McLeod, 2011). Thus, rather than starting out from a certain socio-cultural perspective and then testing it with data, this study intended to extract the fundamental concepts for understanding the use of ecstasy inductively from a review of the data provided by a socio-historical overview of the substance. In this respect, we think that the short life of ecstasy (practically since the mid-1970s to date) can show the factors which made an absolutely minority drug spread in certain contexts, and finally, become one of the substances most commonly used. Although, obviously, ecstasy has biochemical properties and an impact on the central nervous system, as we intend to show, the reasons that have made the substance's social expansion so spectacular are, above all, socio-cultural. Material was taken from impact journals, books and annual reviews in relevant disciplines for an exhaustive critical history of ecstasy in Western culture and its consequences for a logical understanding of drugs linked to certain societies and historical times.

A socio-cultural history of ecstasy

The birth of ecstasy

3,4-metilendioximetanfetamina (MDMA), also known as "ecstasy" or "M" in Europe and "XTC" or "Molly" in the USA, was synthesised for the first time by the Merck pharmaceutical company in Darmstadt, Germany, in 1912. The chemical and social development of MDMA goes hand in hand with the now deceased unparalleled pharmacologist, Alexander Shulgin.

In his fundamental text, *PIHKAL: A chemical love story* (Shulgin & Shulgin, 2011) Shulgin tells how the first news of the effects of MDMA were received in the mid-70s from a student at the University of California in San Francisco, Merrie Kleinman, who said she and two other girlfriends had taken 100 mg of MDMA as a sort of experiment. Although this student related very little about the effects of the drug, it suggested to Shulgin that it was mainly an emotional experience, and that the three girlfriends had had a good reaction to the substance. This encouraged Alexander Shulgin to synthesise the drug again and try it himself. His evaluation was the following: "It was not a psychedelic in the visual or interpretative sense, but the lightness and warmth of the psychedelic was present and quite remarkable" (Shulgin & Shulgin, 2011, p. 69).

Therefore, Shulgin ironically baptised MDMA as the "low-calorie Martini" and began to understand that it could be useful in certain cases when a full psychedelic experience made no sense. Following this line of thought, as he tells it, in 1977 he provided a certain amount of MDMA to a psychologist residing in Oakland to whom the only ironically obvious reference is the biblical name of "Adam" ("Adam" is the name he gave the substance in its psychotherapeutic contexts). It seems that this psychologist, in addition to his official work, carried out a line of clinical work in which he used several psychedelics to facilitate therapy sessions. The effects of MDMA were so beneficial for his patients that "Adam" spent the following 10 years touring the US from one end of the country to the other showing mental health professionals how to use the substance (Shulgin & Shulgin, 2011). In spite of this, therapeutic uses of MDMA, or at least its legal therapeutic uses, had a rather short life, and in 1985 the drug was urgently added to List I substances without therapeutic use, only admissible in experiments with animals. Ironically, the debate that its being put on List I generated in the scientific community and American society, covered extensively by the media, had an important repercussion in terms of an increase in demand for the substance in the streets of the US and Europe (Karch, 2011).

Ecstasy on the street before raves

From 1977 to 1985, when it was made illegal, ecstasy was popular in four different types of groups: university students, yuppies, gays and in "New Age" movements (Sáiz Martínez et al., 2003). An epidemiological study at that time revealed that at the University of Stanford, 39% of the students had tried the substance at least once (Peroutka, 1987), and MDMA was known at one time as the "yuppie psychedelic" (Beck & Morgan, 1986; Mandel, 1984). Thus, according to Mandel (1984), yuppies and other professional classes saw ecstasy as an instrument for relaxing and opening up emotionally in a world which required a continually stressful, rigid lifestyle, in what one user called "controlled hedonism" (Beck & Rosenbaum, 1994). In the beginning, as a street drug, the most important centre of use of the substance in the third group was the black gay environment in the inner cities of Chicago and New York City (Collin, 2002), such as the gay club "The Saint" in Manhattan. At this nightclub, which opened in 1980, according to Savlov (2000), it was common for everyone to be "high" on ecstasy. Its use in the New Age movement was described in an influential article published in Newsweek magazine, according to which MDMA was, "The drug of choice of those who identify with the global consciousness and romantic ecology of the 'New Age' movement" (Adler, 1985, p. 96).

The rave movement, the cultural manifestation most clearly linked to use of MDMA, was significantly influenced by these four worlds where the drug had previously been used: youth, yuppies, gays and the New Age movement.

The tie between MDMA and electronic music

The first tie between MDMA and electronic music is said to have been in Ibiza, where the drug was introduced at the beginning of the eighties, and where it created its own style of music known as "Balearic" (Smith, 2013). The cocktail shaker where these two intoxicating elements were combined was an Ibiza disco called "Amnesia" (Smith, 2013). The combination of MDMA and electronic music was so explosive that when one of "Amnesia's" customers, Paul Oakenfold, went back to England and tried to open a club where "Balearic" music was played, but without ecstasy, he had to close almost before it was opened (Collin, 2002). DJ Danny Rampling, another of "Amnesia's" customers, was successful in the business, and along with his wife Jenny, recreated the chemical, musical and spiritual Ibiza atmosphere at a London gym, which at night was transformed into a club called "The Shoom" (Reynolds, 1999). Other clubs, of which "The Spectrum" and "The Trip" are the most famous, quickly attempted to set a different style from "The Shoom" in London (Collin, 2002; Smith, 2013). In Manchester, the best-known club was "The Hacienda" (Moore, 1995). However, these clubs posed several problems, the most obvious being the closing time. Most of the clubs had to close at two in the morning, so the parties often moved on to other venues, such as houses or empty warehouses. Meanwhile, a negative view of these parties began to take hold in public opinion. Several events in 1988 in the United Kingdom contributed to this sinister tone becoming associated with everything related to clubs, illegal parties, electronic music and ecstasy (Collin, 2002). The first deaths from ecstasy covered by the British press of the times referred to young people who had died from dehydration or hyperthermia, common effects of MDMA, more so when taken in close, crowded places, without enough to drink and without rest. As a result of these deaths, the usual advice for reducing risk was to drink plenty of water and rest to avoid the most dangerous effects of the drug. It was precisely such advice which led Leah Betts, an 18-year-old girl who had taken two ecstasy pills the day of her birthday and was scared of the effects the substance had, to drink so much that she died of hyponatremia, a hydroelectrolite

disorder defined as a concentration of sodium in blood below certain critical levels that can come from drinking too much water, among other causes (Nutt, 2012). Attempting to react to the social phenomenon this was causing, the British government passed a law in July 1990 known as Bright's Entertainment (Increased Penalties) Bill, which increased fines on illegal parties to the disproportionate amount of 20,000 Pounds Sterling and six months imprisonment (Smith, 2013). At the same time, Parliament, to integrate the new form of leisure in the mainstream culture, increased the number of licenses granted to clubs to extend their closing time and facilitated organisation of legal parties. From here on, commercial, or "mainstream" parties and clandestine, or "underground" were divorced. Thus, the first led to the "club" phenomenon, integrated in the mass consumption of music and dancing circuits, and the second led to a supposedly selfmanaged alternative party space, which can properly be called "raves" (Romaní & Sepúlveda, 2005).

During the same period, while these events were occurring, and supporting the whole disturbation created in England, "raves" were exported from the old continent to the new, starting, unsurprisingly, with California. From California, the rave movement spread to the rest of the US, and by this or other pathways, ended up becoming a worldwide phenomenon that can be found in such diverse places as Moscow, Thailand, Latin America, North America, Australia, or even Beirut (Goulding & Shankar, 2004).

How ecstasy fits into raves

From the beginning, MDMA was a drug that fit in well with raves. In fact, the substance facilitated both the demand for a sudden change in participant roles at these celebrations and their style while at them. It should be recalled, in this respect, that the people who participated in this type of party were usually socially integrated, and had to make a fast transformation from their usual demeanour. As one raver in Los Angeles said,

It's not a bunch of hippies running around getting psychedelic in the desert. There're people who have very respectable careers, a lot of people involved in music and art and multimedia. Definitely, very into technology...Everyone's got jobs ... (Sylvan, 2005, pp. 141–142)

It is understandable that a chemical aid would help a person go from IT industry employee, for example, to dancing to techno music in an isolated environment, and MDMA does that, without doubt. The effects of ecstasy begin to appear rather quickly, in about half an hour after taking it. The "flat" phase, when the substance develops its maximum effect, lasts about an hour or two after ingestion and disappears in around four hours after taking it (Corral y Alonso & Sopelana Rodríguez, 1998). Its pharmacodynamics match the timing of raves well. If a person takes the drug on arrival, the first half hour, in which ecstasy still has no noticeable effect, would help them orient to the environment. From then on, for two or three hours, the chemistry of the substance and the party create a new context for role change. In this new context, ravers can shed their usual rigid sense of self, preponderance of rational analyses of situations and basic verbal communication, for a new character in which the sense of "self" is lost, or at least weakened, and emotion takes on huge importance as a way of making contact with reality and corporeality (Moore, 1995). Once this change of role has taken place, people usually try to keep it up for a longer time than a single dose allows, and thus, most ravers take it again at least once more (Hammersley et al., 1999; Topp et al., 1999). At the end of the party, their return to their usual condition is helped by conversations with friends in a more relaxed environment.

And if the timing of ecstasy pharmacodynamics is well-suited to the time and space of raves, enabling smooth transitions between participant roles, their effects also go hand in hand with what people who go to the parties are expected to be like. The positive effects of taking the drug most commonly referred to by occasional MDMA consumers are more energy, more cheerfulness or happiness, being friendlier to others and having fewer feelings of hostility or aggressiveness (Davison & Parrott, 1997; Peroutka et al., 1988; Solowij et al., 1992). And the rest, electronic music with its own rhythms, provides a certain structure and order to possible anxieties derived from the change in state of awareness of the person caused by ecstasy (Lyttle & Montagne, 1992).

About the relationship between MDMA and raves and the spread of the drug to pop culture

The connection between raves and MDMA, although interwoven and closely linked, is not closed. Ecstasy is not the only drug taken at raves, nor are raves the only environment in which ecstasy is taken. In fact, a wide range of substances are taken at raves, most of which can be qualified as in the open generic category of "party drugs", "dance drugs" or "club drugs" (Chakraborty et al., 2011). In addition to MDMA, also included under these labels are substances as varied as y-Hydroxybutyric acid (GHB), the so-called "date rape drug"; flunitrazepam, a benzodiazepine marketed by the Roche pharmaceutical company under the name Rohipnol; and ketamine, an anaesthetic sold under different trade names (Britt & McCance-Katz, 2005; Gahlinger, 2004).

And while it is true that not only ecstasy is taken at raves, it is also true that ecstasy has spread to contexts other than just raves. According to a study by Boeri et al. (2004), ecstasy became more and more common in places dominated by music and dancing in addition to raves, such as guy clubs, hip-hop clubs or concerts, in bars in marginal neighbourhoods in cities, in public places such as streets, parks or supermarkets, and in the homes of users. At least it seems that it was that way among young people from 18 to 25 years old in Atlanta, in the US. On the other hand, there is no lack of parents who have acquired the use of ecstasy from their children, although, obviously, not the electronic music, the lollypops or other paraphernalia in a simple search for a refuge from life (Anonymous, 2003). This use of the drug as a place of refuge, as just mentioned, which appeared in Confessions of a middleaged ecstasy eater (Anonymous, 2003), has also spread among the younger population, who, regardless of what their first contexts of use were, use ecstasy more and more to reduce emotional distress and stress caused by complicated situations in life, traumatic experiences, or simply to improve their mood and function better with people in their daily life (Moonzwe et al., 2011).

It could be said that ecstasy is rapidly spreading to cultural environments other than techno music, and becoming popular among people in the street. Interscope Records published Madonna's album "MDNA" on March 26, 2012. As stated in Wikipedia (Wikipedia Contributors, 2014), the title of this album is a play on words referring to the name of the singer, to deoxyribonucleic acid (DNA), and MDMA. The provocative pop star Miley Cyrus also advertised it in her song, "We can't stop," which refers to "dancing with Molly" ("Molly" is the new and more glamorous name for the substance recently in use in the street in the US). Lady Gaga is not left out either. In her interview on the Watch what happens live programme, she admitted that it was her favourite drug, and was using it when she recorded her last project, "Artpop", and even warned that it not be abused, especially if you did not want to be like her (La Vanguardia, 2013). More recently, in February 2020, the well-known actor Noah Centineo, in an interview with Harper's Bazaar, admitted that he and some friends "take Molly and talk for five hours and, like, get to the bottom of some really deeply philosophical existential questions" (US Weekly Staff, 2020). Although it is still too soon to know how far beyond raves ecstasy will finally spread, it is

clear that, like cocaine in the eighties, it is becoming socially "cool". One example of this is the significant expansion of the drug in Norway. In the Oslo Nightlife Study, 19% of the respondents reported lifetime use of ecstasy/ MDMA (Nordfjærn et al., 2016). In the same geographic context, MDMA users portrayed themselves as open, resourceful and sophisticated (Edland-Gryt et al., 2017). As if these qualities were not enough, "this user group described itself as inclusive, encompassing a wide variety of people" (Edland-Gryt el al., 2017, p. 6).

A critical analysis of ecstasy culture

Separation from normal places of normal life, rupture with daily monotony, energy, cheerfulness, friendliness, sensuality, pleasure and enjoyment, all seem to be offered by raves, with their chemical assistance, to young people around the world. At first glance, it sounds good. It is not surprising that this type of party has been understood as a form of youthful resistance through which young people can flee from repressive moral prohibitions to seek pleasure, freedom, elimination of sexual prejudice, and in the end, claim "the right to party" (St. John, 2004). And it may have been like that in the beginning. However, we think a more profound analysis of the current reality could easily lead to the opposite conclusion. That is, understanding that raves, and the use of MDMA in other contexts, today constitutes a ritual in which certain types of young people, educated in the values of late modernity, meet with obligations imposed on them by mainstream culture, at the same time their achievement is impeded by something other than the chemistry of ecstasy.

To begin with, "the duty to be happy" (Bruckner, 2001) and "the tyranny of the positive attitude" (Held, 2002) have been discussed. According to Pascal Bruckner (2001) and Barbara Held (2002), there is at the present time pressure without precedent in Western history for people to have a "positive" or "optimistic" attitude and to be "happy" all the time. It is precisely this pressure, insensitive to real-life difficulties, that could paradoxically lead to people feeling frustrated when they are not happy, when they feel bad, or do not see the world as rosy (Bruckner, 2001; Held, 2002). We do not think it is a coincidence that Barbara Held (2002), when she identified this tyranny of optimism in American culture, pointed out, among other examples, the "smiley" icon, that yellow face with two black dots for eyes and half a circle showing an expression of complete happiness. The "smiley" was precisely one of the major icons of "Acid House" and was used in England around 1988 as a sort of "secret sign" of belonging to the "rave" movement. Somehow, since the popularisation of MDMA, the particular conditions of life are no longer in the happiness driver's seat, but those of the initiates in the substance who usually meet their obligation to be happy and have "a good time" on the weekends. Thus, as noted by Sylvan (2005), for many people who go to raves, this feeling of happiness is the main reason for going to them. One of the people interviewed by Sylvan (2005, p. 70), even said, "It's all about happiness", and another said that at raves, "You just get incredibly happy. You get filled with a real sense of joy" (Sylvan, 2005, p. 70). With all of the above, sooner or later, ecstasy also collects on its debt in the same currency, and as research shows, the most common subacute effect of taking the drug is feeling low and one of the most chronic effects is depression (McCardle et al., 2004; Verheyden et al., 2003).

Another of the duties that young people fulfil when they participate in raves, or take MDMA in new places, would be "connecting" and participating in a community which understands them and which they can understand. Not in vain has ecstasy been classified as an "empathogen", for its ability to increase the capacity of the one who takes it to identify with the emotions of another person, or an "entactogen", for facilitating contact with one's own experience. According to Ralph Metzner, who coined the term "empathogen", the most characteristic note in the MDMA experience would be precisely "the relatedness, the feeling of connectedness or communion with others, that ability to feel what others feel – in short the empathic resonance that is evoked" (Metzner, 1993). If you ask young people who go to raves, you find that this type of interest is present. A South African student resident in Cape Town said,

I go to raves because it is a place where I am free to express myself without all the constraints society sets for me. I can smile at the stranger next to me and have them smile back without any strings attached to those good feelings. It is rare that in a world like ours that so many people from all walks of life can come together and experience such unity and acceptance towards each other. (Fritz, 1999, p. 196)

As we have seen, the rave world, with its unique mixture of drugs, music and dance, seduces people to the extent that it is an environment in which young people, for a time, can relate to themselves and to others in a different way, generating a different community. This alone may compensate, for many of its participants, for the emotional "crash" which is one of the most characteristic sub-acute effects of the substance (McCardle et al., 2004; Verheyden et al., 2003).

The "rave" space is thus what Schutz (1973) called a "finite province of meaning", places segregated from the space where ordinary life goes on and where the intersubjective world is altered or modified, and therefore, where a different reality emerges. And it might even be added that much of its attraction resides precisely in demonstrating the break with the usual ways of life and the world-taken-for-granted, with the "paramount reality", to use Schutz's own terms.

In view of this, we think raves have become a sort of "explosive community" (Bauman, 2000). According to Bauman (2000), this type of community, among which raves fit perfectly in our opinion, forms for a single purpose and tends to be transitory and volatile. In contrast to the traditional forms of community, "explosive communities" do not get their power from their ability to organise and make sense of daily life, but paradoxically, from their temporal precariousness, from the emotional reversal the participants make while the union of their members lasts. Therefore, Bauman (2000) classifies "cloakroom" or "carnival" communities as typical forms of this type of community.

"Cloakroom communities", says Bauman (2000),

... need a spectacle which appeals to similar interests dormant in otherwise disparate individuals and so brings them all together for a stretch of time when other interests – those which divide them instead of uniting – are temporarily laid aside, put on a slow burner or silenced altogether. Spectacles, as the occasion for the existence of a cloakroom community, do not fuse individual interests in a "group interest"; those interests do not acquire a new quality by coming together, and the illusion of a shared situation provided by the spectacle does not last much longer than the excitement caused by the performance. (Bauman, 2000, p. 211)

Raves, with the huge help of ecstasy, as discussed above, would therefore be a postmodern manifestation of the longing for community of young people, who in fact find themselves more isolated, atomised, in conflict and impotent than ever (Beck & Beck-Gernsheim, 2002).

Discussion

This study, based on a socio-cultural drug research paradigm, intended to exemplify a different way of approaching drug use in general and ecstasy use in particular. This approach proposes that drugs be studied in association with the cultural environment in which they are embedded, the regulatory and personal contradictions it is intended to avoid with their use and the "recreational" contexts they are taken in. The explanation given, relating ecstasy to raves, could have concentrated on other substances and other contexts. For example, the relationship between LSD and the hippy counterculture of the sixties, cocaine and the "yuppie" world of the seventies, or heroin and the appearance of the "yonkie" anthropological figure in New York in the mid-fifties. In these or other environments, the drugs used have favoured, promoted or reinforced each subculture in particular, facilitating entry of neophytes, strengthening group cohesion, enabling contradictions of the subculture itself to be hurdled, etc. The ideology of that subculture has in turn influenced the psychophysiological effects of taking the drug, and thereby profoundly determined what the person drugged may have experienced.

This proposal of a way of constructing a radically cultural psychology of drugs is accompanied not just by a critical viewpoint (e.g., questioning the usefulness of studies with animals for a logical understanding of substances taken by people), but also places three basic elements in the foreground for understanding the use of drugs at any given time. As proposed here, these notions are the subculture, the myth and the ritual. These concepts are taken both from socio-cultural analyses applied to fields outside drug use such those of Frank and Frank (1991) or Turner (1969), and studies on the environment of substance use (Clarke et al., 1976). Nonetheless, we believe such concepts emerge from a critical and inductive analysis of the historical data on the substance described above following a grounded theory methodology.

The first of these concepts was illustrated by ecstasy and raves, as the use of this drug, especially at a certain historical moment, cannot be understood without its association with the rave subculture. The drug and the subculture drive each other in parallel timing. In addition, subculture environments such as raves have their own characteristics which distinguish them from "mainstream" culture and show their "break" from it (held in isolated places, characteristic dress, music, etc.). However, as pointed out by Clarke et al. (1976), there are also elements that articulate and link the various subcultures with mainstream culture, of which they are just subsets. This articulation makes it possible, on the one hand, for certain elements of subculture environments to join other different subculture environments or the "mainstream" culture. This was how ecstasy penetrated "pop" culture in recent years through mainstream representatives (Madonna, Miley Cyrus and Lady Gaga). As much could be said of the sex revolution, so characteristic of the hippie counterculture of the sixties and of the use of LSD, which went on to become integrated, with more or less luck, in most of Western society. On the other hand, the opposite relationship can also be shown, and certain elements of the "mainstream" culture exert an influence on subculture environments. Thus in our study, the articulation between the rave and mainstream cultures enables us to understand how one of the main functions of the use of ecstasy at those parties was the attempt of its participants to "be happy" and that this "need" is still a characteristic of individuals brought up in Western middle-class values. In any case, and with some nuances we may want to make, it seems that the relevance of the subculture is necessary to some kinds of drug use. Not in vain has it repeatedly been shown that the best predictor of the use of drugs among adolescents is their involvement in the drug subculture (Hawdon, 2005).

Another two concepts, myth and ritual, which we understand to be at the core of a socio-cultural approach to drugs, are derived from the notion of subculture. Becker (2009) says, subcultures are characterised by two interrelated elements:

... a set of notions and points of view about what the world is and how to struggle with it, and a set of routines based on those notions. (Becker, 2009, p. 56)

We call the first element, that is, the set of notions and points of view about what the world

is and how to struggle with it, "myth". The second point, the set of routines based on the myth, we call "ritual".

Both myth and ritual constitute the elements that articulate the individual with the group and promote the use of certain substances, determining, to a large extent, their effects. The different subcultures have, among their most characteristic myths, the goodness of certain substances and the harmfulness of others. MDMA was seen as a "positive" drug, at least in the origins of the rave culture, while cocaine, heroin and nitrous oxide were clearly understood to be harmful. On the contrary, in Spain at the end of the eighties and beginning of the nineties, cocaine was adopted by very integrated and prestigious groups who created a label for it as a clean drug linked to power (Calafat et al., 2001, p. 63). Each subculture has certain myths that affect drugs, and which, for more ideological than scientific reasons, classify them as "good" or "bad" (Nutt, 2012).

Each subculture also has a set of rituals that confirm or adhere to its myths. In each environment, there are different rituals. In some of these rituals, drugs appear as the core element. Apart from drugs, another basic element of the rituals of each subculture, and sometimes related to them, is the music. We tried to explain the association between ecstasy, techno music and this type of festive ceremony in raves. The major role of music also stood out in the relationship with the hippy counterculture and its ability to construct the psychedelic experience. In general, it could be said that drugs and music are basic elements of certain rituals that confirm a person's sense of identity and place it in a certain subcultural environment (Shapiro, 2006).

This approach to drugs is not free of problems, and is, of course, complicated to carry out and analyse. A first problem has to do with the search for a reference or paradigmatic figures for the relationship between substances and subcultures (e.g., LSD and the counterculture hippy movement of the mid-sixties, cocaine chlorhydrate and the "yuppies", etc.). These figures are never really clear, and due to the nature of the social groups themselves, a drug that characterises a group one minute, may sometime later go on to be prototypical of another. So, for example, we mentioned above that there was a relationship between using cocaine and the "yuppie" lifestyle of the seventies. However, at the beginning of the 20th century, cocaine traffic was common among the decadent London clubs in Soho (Walton, 2003), and in Spain in the 1920s, the substance was known as a "brothel stimulant" (Usó, 1995, p. 113). It is also true, as pointed out by Walton (2003, p. 179), that in the eighties, lower-class British young people who had grown up using amphetamines, quickly went on to cocaine. So, it is hard to take a snapshot, and analyses always require the historical moment to be taken into consideration. But, with all of the above, this fluctuation in historical contexts and experiences forms part of the thesis argued here and would underline the pertinence of an approach such as the one offered in this study. It is also possible that certain cultural elements related to a subculture and a drug may be transferred to others. For example, the subculture rave slogan was "Peace, Love, Unity and Respect" (PLUR), and "peace and love" was the slogan for the 1960 hippies, who also emphasised unity and respect. The influence of some subcultures (and of some drugs) on others is again part of the argument defended here. Similarly, it is always possible for there to be individuals who take a specific substance without belonging to any ideology at all, or sharing the values of the group that has brandished it as a sign of identity. So although, in this study, ecstasy is associated with the rave culture and the typically young, Confessions of a middle-aged ecstasy eater (Anonymous, 2003), relates the experiences of a man of some age who takes the drug in non-festival contexts, and builds it up in a different direction from the usual adolescent user. It is also possible that more than one drug has influenced the same cultural movement. Thus, although LSD has been pointed out as the drug best associated

with the counterculture of the sixties, it is also true, as Lee and Shlain (2002) say, that marihuana exerted a fundamental role in this social movement, especially as the doorway to acid. In such cases, it seems clear that, in certain rituals, both drugs produce experiences that simultaneously confirm the myths about the subculture where they are consumed, reinforcing use by the other and vice versa.

Certainly, this study has limitations and points that would require a wider discussion than given here. For example, the pressure to be happy has been emphasised (Bruckner, 2001; Held, 2002) as a factor responsible for the expansion of ecstasy. This social pressure on being happy not only leads to more use of ecstasy in the young population, but development of a whole night-time entertainment industry (pubs, bars and nightclubs) and use of other drugs. Dolder et al. (2017) found that drinking alcoholic beverages increased participant scores on visual analogue scales related to emotional states such as "stimulated", "happy", "talkative", "open" and "want to be with others", in a way very similar to the usual effects of ecstasy. This would lead us to believe that this pressure to be happy could influence the use of other drugs as well, and even central nervous system depressants, such as alcohol. However, it is also true that when drugs such as LSD, amphetamine and MDMA are compared, the effects of feeling elation, agreeableness and composure, so near the usual conception of feeling happy, by the last are significantly stronger than with the first two (Parrott & Stuart, 1997). Similarly, we have linked MDMA use with raves. At the same time, we recognise that MDMA has been extending to other contexts beyond raves. The drug may previously have spread to those contexts, but was not detected because its use in raves was attracting so much attention at the time. We should also clarify that the discussion of the use of MDMA at raves did not necessarily have to spread to other different contexts. The use of ecstasy could respond to very different pressures than being happy or feeling connected with other people if taken at other times or in other cultural environments.

This analysis of ecstasy, made from a sociocultural perspective, is not intended to deny in any way that MDMA or other drugs have certain bio-chemical properties and a specific effect on people's nervous systems. It does intend to show that the expansion of a substance and the effects that it causes are strongly influenced by the socio-cultural context and that it is impossible to understand ecstasy in particular, and drugs in general, without paying attention to the cultures and subcultures where they are used. Thus, we believe that the amazing development of ecstasy as a recreational drug could hardly be explained based on purely biologicist arguments or a cognitive-behavioural paradigm. The subculture concepts of myth and rites noted, along with a critical analysis of today's society with regard to the pressures exerted on young people, have enabled this study to explain the sense that use of MDMA makes in Western youth culture.

Future lines of research could concentrate, as mentioned, on the relationship of other cultural movements and certain drugs (the hippies and LSD, etc.). It would also be interesting to delve into the implication of music in ceremonies where drugs are consumed (Rouget, 1985). Perhaps this potentiality, which is already present in music, is strengthened by taking drugs, and the two are thus basic elements of rituals for producing altered states of awareness, transitions between roles or important social changes. The ability of rituals with drugs to produce religious experiences could be studied in the same way as the relationship between raves and MDMA (St. John, 2004).

In general, it was intended to show the relevance of the cultural approach to critical study of drugs and addictions. This position would definitely benefit from the articulation of knowledge of "scholars" with those of "users" of substances, following a proposal that places drugs in their true context (Loredo, 2014). A socio-cultural proposal for the study of drugs such as this one, with its inherent difficulties and methods, could be of benefit for an understanding of the drug use phenomenon when scientific study has become so clogged down (Alexander, 2008).

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

José Manuel García-Montes D https://orcid.org/ 0000-0001-8410-9115

References

- Adler, J. (1985, April 15). Getting high on "ecstasy". Newsweek, p. 96.
- Alexander, B. K. (2008). The globalization of addiction: A study in poverty of the spirit. Oxford University Press.
- Anonymous. (2003). *Éxtasis. Confesiones de un consumidor maduro* [Confessions of a middle-aged ecstasy eater]. Trama.
- Apud, I., & Romaní, O. (2016). La encrucijada de la adicción. Distintos Modelos en el estudio de la drogodependencia [The crossroads of addiction: Different models in the study of drug dependence]. Salud y Drogas, 16, 115–125.
- Bauman, Z. (2000). Modernidad líquida [Liquid modernity]. Fondo de Cultura Económica.
- Beck, J., & Morgan, P. A. (1986). Designer drug confusion: A focus on MDMA. *Journal of Drug Education*, 16, 287–302.
- Beck, J., & Rosenbaum, M. (1994). Pursuit of ecstasy: The MDMA experience. State University of New York Press.
- Beck, U., & Beck-Gernsheim, E. (2002). *Individualization*. SAGE.
- Becker, H. (1953). Becoming a marihuana user. American Journal of Sociology, 59, 235-242.
- Becker, H. (1967). History, culture and subjective experience: An exploration of the social bases of drug-induced experiences. *Journal of Health and Social Behavior*, *8*, 163–176.
- Becker, H. (2009). Outsiders. Hacia una sociología de la desviación [Outsiders: Studies in sociology of deviance]. Siglo XXI.

- Boeri, M. W., Sterk, C. E., & Elifson, K. W. (2004). Rolling beyond raves: Ecstasy use outside the rave setting. *Journal of Drug Issues*, 34, 831–859.
- Britt, G. C., & McCance-Katz, E. F. (2005). A brief overview of the clinical pharmacology of "club drugs". Substance Use & Misuse, 40, 1189–1201.
- Bruckner, P. (2001). La euforia perpetua: sobre el deber de ser feliz [Perpetual euphoria: On the duty to be happy]. Tusquets Editores.
- Cadet, J. L. (2019). Animal models of addiction: Compulsive drug taking and cognition. *Neuroscience and Biobehavioral Reviews*, 105, 5–6.
- Calafat, A., Juan, M., Becoña, E., Fernández, C., Gil, E., & Llopis, J. J. (2001). Vida social de la cocaína [The social life of cocaine]. *Adicciones*, 13, 61–104.
- Chakraborty, K., Neogi, R., & Basu, D. (2011). Club drugs: Review of the "rave" with a note of concern for the Indian scenario. *Indian Journal of Medical Research*, 133, 594–604.
- Clarke, J., Hall, S., Jefferson, T., & Roberts, B. (1976). Subcultures, cultures and class. In S. Hall & T. Jefferson (Eds.), *Resistance through rituals: Youth subcultures in post-war Britain* (pp. 10–11). Hutchinson.
- Collin, M. (2002). Estado alterado. La historia de la cultura del éxtasis y del Acid House [Altered state: The story of ecstasy culture and Acid House]. Alba Editorial.
- Corral y Alonso, M. A., & Sopelana Rodríguez, P. A. (1998). Drogas de diseño: la MDMA ("Éxtasis")
 [Designer drugs: MDMA ("ecstasy")]. *Psiquia-tría Pública*, 10, 389–398.
- Davison, D., & Parrott, A. C. (1997). Ecstasy (MDMA) in recreational users: Self-reported psychological and physiological effects. *Human Psychopharmacology*, 12, 221–226.
- Dolder, P. C., Holze, F., Liakoni, E., Harder, S., Schmid, Y., & Liechti, M. E. (2017). Alcohol acutely enhances decoding of positive emotions and emotional concern for positive stimuli and facilitates the viewing of sexual images. *Psychopharmacology*, 234, 41–51.
- Duka, T., Sahakian, B., & Turner, D. (2007).
 Research into brain science, addiction and drugs.
 In D. Nutt, T. W. Robbins, G. V. Stimson, M. Ince, & A. Jackson (Eds.), *Drugs and the future:*

Brain science, addiction and society (pp. 133–168). Academic Press.

- Edland-Gryt, M., Sandberg, S., & Pedersen, W. (2017). From ecstasy to MDMA: Recreational drug use, symbolic boundaries, and drug trends. *International Journal of Drug Policy*, 50, 1–8.
- Frank, J. D., & Frank, J. B. (1991). Persuasion and healing: A comparative study of psychotherapy (3rd ed.). Johns Hopkins University Press.
- Fritz, J. (1999). Rave culture: An insider's overview. Smallfry Press.
- Gahlinger, P. M. (2004). Club drugs: MDMA, Gamma-Hydroxybutyrate (GHB), Rohypnol, and Ketamine. *American Family Physician*, 69, 2619–2627.
- Glaser, B. G., & Strauss, A. (1967). *The discovery of* grounded theory: Strategies for qualitative research. Aldine.
- Goulding, C., & Shankar, A. (2004). Age is just a number: Rave culture and the cognitively young "thirty something". *European Journal of Marketing*, 38, 641–658.
- Haer, J. L. (1969). The psychedelic environment: A new psychological phenomenon. *The Journal of Popular Culture*, 3, 260–266.
- Hammersley, R., Ditton, J., Smith, I., & Short, E. (1999). Patterns of ecstasy use by drug users. *British Journal of Criminology*, 39, 625–647.
- Hawdon, J. E. (2005). Drug and alcohol consumption as functions of social structures: A crosscultural sociology. Edwin Mellen Press.
- Held, B. S. (2002). The tyranny of the positive attitude in America: Observation and speculation. *Journal of Clinical Psychology*, 58, 965–992.
- Karch, S. B. (2011). A historical review of MDMA. *The Open Forensic Science Journal*, 4, 20–24.
- La Barre, W. (2012). *The peyote cult*. University of Oklahoma Press.
- La Vanguardia. (2013, October 1). Lady Gaga confiesa su adicción a la droga "Molly" [Lady Gaga confesses her addiction to "Molly" drug]. La Vanguardia. http://www.lavanguardia.com/gente/ 20131001/54390263860/lady-gaga-confiesa-adic cion-droga-molly.html
- Lee, M. A., & Shlain, B. (2002). Sueños de ácido. Historia social del LSD: La CIA, los sesenta y todo lo demás [Acid dreams: The complete social

history of LSD: The CIA, the sixties, and beyond]. Castellarte.

- Levi-Strauss, C. (2009). Antropología estructural [Structural anthropology]. Siglo XXI.
- Loredo, J. C. (2014). Reapropiarse de los psicofármacos [Reappropriating psychotropic drugs]. *Diagonal.* https://www.diagonalperiodico.net/ cuerpo/24120-reapropiarse-psicofarmacos.html
- Lyttle, T., & Montagne, M. (1992). Drugs, music, and ideology: A social pharmacological interpretation of the acid house movement. *International Journal of the Addictions*, 27, 1159–1177.
- Mandel, B. (1984, June 10). The yuppie psychedelic. *San Francisco Chronicle*, p. A2.
- McCardle, K., Luebbers, S., Carter, J. D., Croft, R. J., & Stough, C. (2004). Chronic MDMA (ecstasy) use, cognition and mood. *Psychopharmacology*, *173*, 434–439.
- McLeod, J. (2011). Qualitative research in counselling and psychotherapy. SAGE.
- Metzner, R. (1993). Letter from Ralph Metzner. Maps.org. http://www.maps.org/news-letters/ v04n1/04143met.html
- Milhet, M., Moloney, M., Bergeron, H., & Hunt, G. (2011). Drugs and culture. In G. Hunt, M. Milhet, & H. Bergeron (Eds.), *Drugs and culture: Knowledge, consumption and policy* (pp. 1–12). Ashgate.
- Moonzwe, L. S., Schensul, J. J., & Kostick, K. M. (2011). The role of MDMA (ecstasy) in coping with negative life situations among urban young adults. *Journal of Psychoactive Drugs*, 43, 199–210.
- Moore, D. (1995). Raves and the bohemian search for self and community: A contribution to the anthropology of public events. *Anthropological Forum*, 7, 193–214.
- Nordfjærn, T., Bretteville-Jensen, A. L., Edland-Gryt, M., & Gripenberg, J. (2016). Risky substance use among young adults in the nightlife arena: An underused setting for risk-reducing interventions? *Scandinavian Journal of Public Health*, 44, 638–645.
- Nutt, D. (2012). Drugs without the hot air: Minimising the harms of legal and illegal drugs. UIT.
- Orford, J. (2013). *Power, powerlessness and addiction*. Cambridge University Press.

- Parrott, A. C., & Stuart, M. (1997). Ecstasy (MDMA), amphetamine, and LSD: Comparative mood profiles in recreational polydrug users. *Human Psychopharmacology: Clinical and Experimental*, 12, 501–504.
- Peroutka, S. J. (1987). Incidence of recreational use of 3,4-methylenedimethoxymethamphetamine (MDMA, "ecstasy") on an undergraduate campus. *New England Journal of Medicine*, 317, 1542–1543.
- Peroutka, S. J., Newman, H., & Harris, H. (1988). Subjective effects of 3,4-methylenedioxymetham phetamine in recreational users. *Neuropsychopharmacology*, 1, 273–277.
- Pomerleau, O. F., & Pomerleau, C. S. (1988). A biobehavioral view of substance abuse and addiction. In S. Peele (Ed.), Visions of addiction: Major contemporary perspectives on addiction and alcoholism (pp. 117–139). Lexington Books.
- Reynolds, S. (1999). *Generation ecstasy: Into the world of techno and rave culture*. Routledge.
- Romaní, O., & Sepúlveda, M. (2005). Estilos juveniles, contracultura y política [Youth styles, counterculture and politics]. *Polis: Revista Académica de la Universidad Bolivariana*, 4. http://polis.revues.org/5769
- Room, R. (1976). Ambivalence as a sociological explanation: The case of cultural explanations of alcohol problems. *American Sociologist Review*, 41, 1047–1065.
- Rouget, G. (1985). *Music and trance: A theory of the relations between music and possession*. The University of Chicago Press.
- Sáiz Martínez, P. A., García-Portilla González, P., Paredes Ojanguren, B., & Bobes García, J. (2003). Adicciones, 15, 35–49.
- Savlov, M. (2000, June 9). Countdown to ecstasy. *The Austin Chronicle*. http://www.austinchroni cle.com/music/2000-06-09/77529/
- Schutz, A. (1973). On multiple realities. In A. Schutz, *Collected papers* (Vol. 1, pp. 207–225). M. Nijhoff.
- Shapiro, H. (2006). Historia del Rock y las drogas. La influencia de las drogas en la música popular,

desde el jazz hasta el hip-hop [Waiting for the man: The story of drugs and popular music]. Robinbook.

- Shulgin, A., & Shulgin, A. (2011). PIHKAL: A chemical love story. Transform Press.
- Smith, R. (2013). How and why has ecstasy become synonymous with dance music? [Unpublished Bachelor of Arts thesis]. SAE Institute, London.
- Solowij, N., Hall, W., & Lee, N. (1992). Recreational MDMA use in Sydney: A profile of "ecstasy" users and their experiences with the drug. *British Journal of Addiction*, 87, 1161–1172.
- St. John, G. (2004). The difference engine: Liberation and the rave imaginary. In G. St. John (Ed.), *Rave culture and religion* (pp. 1–15). Routledge.
- Stephens, R. C. (1985). The sociocultural view of heroin use: Toward a role-theoretic model. *Jour*nal of Drug Issues, 15, 433–446.
- Sylvan, R. (2005). Trance formation: The spiritual and religious dimensions of global rave culture. Taylor & Francis.
- Topp, L., Hando, J., Dillon, P., Roche, A., & Solowij, N. (1999). Ecstasy use in Australia: patterns of use and associated harm. *Drug and alcohol dependence*, 55(1–2), 105–115. https://doi.org/ 10.1016/s0376-8716(99)00002-2
- Turner, V. (1969). *The ritual process: Structure and anti-structure*. Aldine.
- US Weekly Staff. (2020, February 11). Celebrity drug confessions. US Weekly. https://www.usma gazine.com/celebrity-news/pictures/celebritydrug-confessions-201474/37229-2/
- Usó, J. C. (1995). *Drogas y cultura de masas* [Drugs and mass culture]. Taurus.
- Verheyden, S. L., Henry, J. A., & Curran, H. V. (2003). Acute, sub-acute and long-term subjective consequences of "ecstasy" (MDMA) consumption in 430 regular users. *Human Psychopharmacology*, 18, 507–517.
- Walton, S. (2003). Colocados. Una historia cultural de la intoxicación [Out of it: A cultural history of intoxication]. Alba Editores.
- Wikipedia Contributors. (2012). MDNA. *Wikipedia*. https://es.wikipedia.org/wiki/MDNA