



**THE**



**IN RAVE**

A profile of young Ecstasy users and its implications for educators

**Fanitsa Zervogiannis**

# THE 'E' IN RAVE

A PROFILE OF YOUNG ECSTASY USERS AND ITS IMPLICATIONS FOR EDUCATORS

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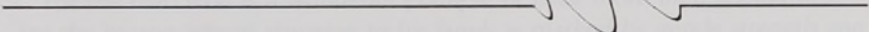
Faitha H Zervogianni

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# THE 'E' IN RAVE

## *A PROFILE OF YOUNG ECSTASY USERS AND ITS IMPLICATIONS FOR EDUCATORS*

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*Fanitsa H Zervogiannis*

University of South Africa  
Pretoria

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IMPLICATIONS FOR EDUCATORS

Franziska W. Zentgraf

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In memory of my late father,  
John Zervogiannis  
ΙΟΑΝΝΙΣ ΖΕΡΒΟΓΙΑΝΝΙΣ,  
1939–2000

*This one is for you, Dad.*

*This is for you, for the father I love.*

*For the one who has helped me through all my childhood fears and failures.*

*For the man who is a wonderful example of what more men should be.*

*For the person whose devotion to his family is marked by gentle strength and guidance.*

*If you never knew how much I respect and admire you,*

*I want you to know it now, Dad ...*

*I think you are the best father that any child ever had.*

– A Rogers

*Rest in peace.*

ΑΙΩΝΙΑ ΣΟΥ Η ΜΝΗΜΗ ΑΓΑΠΗΜΕΝΕ ΜΟΥ ΠΑΤΕΡΑ



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# PREFACE

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The use of methylenedioxymethamphetamine (MDMA) or 'Ecstasy', as it is commonly known, is a phenomenon that has established itself in the widespread Rave culture. Ecstasy use causes not only physical and psychological problems in the development of the adolescent, but may also influence his or her concept of self, academic performance, concentration and learning abilities. The use of the drug can also give rise to a number of social problems that include relations with family, school or work, the law and possible personality changes. To prevent these problems, educators should be well informed regarding current drug-use trends and should also be capable of assisting adolescents. The term *educator* includes parents, teachers, guidance counsellors and psychologists. Teachers as secondary educators possibly only surpass parents in their close involvement in the development of the adolescent.

Research on the precise nature of Ecstasy use and the characteristics of its users is lacking in South Africa. The increase in Ecstasy use amongst school-going adolescents and young adults, and the fact that there are side-effects and unknown long-term effects have made it imperative that educators learn as much as possible about this drug. The purpose of this book is therefore to furnish the educator – as well as the friends of Ecstasy users, the users and potential users themselves – with accurate information that will enable him or her to obtain a reference point from which assistance can be offered to the young Ecstasy user.

## ACKNOWLEDGEMENTS

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Finally, the greatest praise should go to God, whose all-encompassing grace enabled me to complete this research during a trying and emotional time in my life.

ΔΟΞΑΣΜΕΝΟ ΤΟ ΟΝΟΜΑ ΣΟΥ ΚΥΡΙΑ

## ABBREVIATIONS

---

- II-C carbon-11  
[IIC]McN-5652 radioligand  
5-HIAA 5-hydroxyindoleacetic acid; breakdown product of serotonin in spinal fluid  
5-HT hydroxytryptamine; serotonin  
ARF acute renal failure  
AVP arginine vasopressin (formerly an antidiuretic hormone)  
BP blood pressure  
BPM beats per minute  
CD compact disc  
CNS central nervous stimulant  
CSF cerebro-spinal fluid  
DEA Drug Enforcement Agency (USA)  
dec decreased  
DIC disseminated intravascular coagulation (a blood clotting disorder)  
DJ disc jockey  
DSM-IV *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition)  
E Ecstasy  
EEG electroencephalogram  
FDA Food and Drug Administration (USA)  
GHB gammahydroxybutyrate  
ICD-10 Tenth International Classification of Mental and Behavioural Disorders  
LD lethal dose  
LSD lysergic acid diethylamide  
M male  
MAPS Multidisciplinary Association for Psychedelic Studies  
MDA methylenedioxy-amphetamine  
MBDB methylbenzodioxylbutanamine  
MDE methylenedioxy-ethamphetamine  
MDEA methylenedioxy-ethylamphetamine  
MDMA methylenedioxy-methamphetamine (Ecstasy)  
ml millilitre  
mg milligram  
MMDA methoxymethyldioxy-amphetamine  
ng nanogram (one millionth of a gram)  
NIDA National Institute of Drug Abuse  
PET positron emission tomography scans  
PLUR peace, love, unity and mutual respect (Rave ideals)  
POST Parliamentary Office of Science and Technology  
R rhabdomyolysis  
REM rapid eye movement  
SANAB South African Narcotics Bureau  
SANCA South African National Council on Alcoholism and Drug Abuse  
SSRI selective serotonin reuptake inhibitor  
SWS slow wave sleep  
T temperature  
UK United Kingdom  
US United States of America



# CHAPTER 1

## INTRODUCTORY ORIENTATION, PROBLEM ANALYSIS, OBJECTIVES AND DEFINITION OF CONCEPTS

---

### 1.1 INTRODUCTORY ORIENTATION

---

Adolescents of both sexes and from a wide range of social backgrounds are trying and using drugs far more frequently than their predecessors (Parker 1995:01). With the onset of the Rave scene in the late eighties, Ecstasy ranked as one of the favourite substances of abuse. The Rave scene promoted a whole new sub-culture of Ecstasy brand names (distinguished by their colouring or tiny pictograms stamped into the tablet), along with the term *dance drugs* which appropriately described a range of drugs associated with that part of the club scene devoted to music described as *house, techno, garage* and *trance*. Surveys suggest that somewhere between 1 and 5 million people have tried Ecstasy (methylenedioxymethamphetamine (MDMA) in the United Kingdom (UK), with an estimated 500 000 people taking it weekly (New Statesman and Society 1995:14). The use of the drug Ecstasy is extremely common in many other parts of the world including the United States of America (US), western European countries and Australia (Solowij, Hall & Lee 1992:1 161). In South Africa an estimated 10 000 to 12 000 people ingest the drug weekly (South African Police Ecstasy Drug Conference 1996).

The *Pocket Oxford Dictionary* (1978:270) defines *ecstasy* as 'an exalted state of feeling of rapture, joy or delight' and 'an emotional or religious frenzy or trance-like state'. In the mid-eighties, *Ecstasy* acquired another meaning when it was banned in the US – that of the illegal drug MDMA, whose range of effects encompasses all of the above definitions. In South Africa, however, MDMA was legal until 1993. On 7 May 1993 MDMA was taken up in Schedule 8 of the Medicines and Medicines Control Act, 1965 (Act 101 of 1965) (South African Police Ecstasy Drug Conference 1996). Despite the scheduling of MDMA, people still continue to use this drug throughout the world.

Reynolds (1998:xxii) states that 'MDMA is a remarkable chemical, combining the sensory intensification and auditory enhancement of marijuana and low-dose [lysergic acid diethylamide] LSD, the sleep-defying, energy-boosting effects of speed and the uninhibited conviviality of alcohol. If that was not enough, MDMA offers unique effects of empathy and insight.' Depending on expectations and context, the Ecstasy experience ranges from open-hearted, emotional conversation through collective feelings of wellbeing and happiness to full-blown spiritual elevation. Used in therapy (Beck & Morgan 1986:291; Cohen 1995:1 138; Elk 1996:350; Henderson 1997:xx), Ecstasy can facilitate a deep-felt experience of interpersonal communication and self-discovery. In the Rave environment, Ecstasy acts as both 'party-igniting fun fuel' and the stimulus for acceptance and togetherness (Reynolds 1998:xxii).

What all these different uses of MDMA have in common is *ekstasis*: the Greek etymological root of *Ecstasy*. Its literal meaning is 'standing outside oneself' (Reynolds 1998:xxii). 'MDMA takes you out of yourself and into a blissful merger with something larger than the isolate "I", whether that trans-individual is the couple in love or the dancing crowd or the cosmos. MDMA is the "we" drug.' It is about an almost instantaneous way of overcoming alienation (Reynolds 1998:xxii). It is the friendly, happy drug.

Although the Ecstasy phenomenon has been the subject of physiological, sociological, psychotherapeutic and psychiatric investigation, very little research has been done nationally in South Africa. Despite the widespread use of Ecstasy, Solowij, Hall and Lee (1992:1 162) note that there is a paucity of research regarding the ways in which Ecstasy is used and the nature of its effects. Because there are side-effects and unknown long-term effects, it is important to educate users and potential users. The increase in Ecstasy use among school-going adolescents and young adults has made it imperative that educators learn as much as possible about the drug and present that information honestly. Besides parents, teachers are the most intensively involved with the child in his or her daily comings and goings. Through this involvement, they become intimately acquainted with the child and are often the first to notice behavioural changes or when that child is not coping.

Adolescence is a period in which security is sought in conformity with the peer group, in uniformity and in gaining acceptance. It is a period during which social rejection, difference from, and exclusion by, peers are feared. Independence and self-sufficiency are pursued and the establishment of a personal value system leads to internal conflict as well as to conflict with figures of authority (Kruger 1992:03). To target the right audience, educators not only need to know who is taking the drug but also where they are taking it. The information going out to the targeted audience must be seen as accurate and credible. Young people will 'switch off' if the information does not correspond with their own experiences.



Experienced drug counsellor Cruickshank (in Williamson 1997:58) put it in a nutshell when he said: 'Teenagers have antennae like nobody's business. So there is a real danger in portraying something that is exceedingly rare – if it exists at all – as normal. You must give kids the plain facts. If they find out you're talking crap, they'll reject your whole message.'

Although this investigation focuses mainly on the Rave movement and Ecstasy use in late adolescence and early adulthood, namely 17- to 26-year-olds, it should be noted that there are some as young as 13 who are taking it.

## 1.2 PROBLEM ANALYSIS

### 1.2.1 Awareness of the problem

This research was initiated while working in Rave clubs on weekends, where it was observed that Rave is a culture devoted to hedonism; a culture synonymous with togetherness and empathy, and free of aggression and violence. One witnesses acceptance and social equality or, as Henderson (1997:xxvi) observes, 'the greater democratisation of youth culture ... male, female, black, white, whatever social class, gay, straight, able bodied, disabled – it all seemed not to matter'. A utopian existence? Not so. MDMA was the 'secret' element. With a name like *Ecstasy*, no other drug goes by a name which expresses a feeling of any kind, let alone such a positive one. Drug-taking in clubs does not appear to be about addiction, but rather about recreation – a leisure activity. Young people appear to choose to take Ecstasy freely for social reasons. It is fun and they enjoy it. It should be noted, however, that not everyone who participates in Raves takes Ecstasy. However, for everyone, Ecstasy is marketed within youth culture as safe, attractive and good value for money (Parker, Measham & Aldridge 1995:05).

The first impressions that a potential user gets of Ecstasy are the following: MDMA seemingly makes you feel happy, confident, loving towards others, exhilarated and even sexy. It does not seem to have a comedown or any of the fear or anxiety associated with LSD (Henderson 1997:47). You cannot get addicted (at least not physically). One of your friends tries it first and describes positive feelings to you. You finally try one and end up going into a sensual pleasure setting much greater and so much longer lasting than any dance club you have ever set foot in before. Total strangers, often from a completely different social group than your own, become your immediate friends. Anxiety and self-consciousness disappear. Ecstasy is something which allows you to

share the most wonderful experiences and make you feel as though you belong with hundreds or thousands of other people more than you ever did before (Henderson 1997:48). (See Appendix 1.)

## 1.2.2 *Exploration of the problem*

South Africa is experiencing a period of recession and change in all areas, but more particularly in social and political contexts. These changes lead to uncertainty about the future, which can be especially unsettling to the adolescent who is standing on the threshold of adulthood. Escalating crime, unemployment, violence and poverty – all these problems make the youth more prone to seeking an escape from the harsh realities of this modern world. One of the most pleasant escapes they feel, is participating in Raves or all-night dance parties. Doyle (1996:02) recognises the Rave movement as the strongest cultural influence among young people. He believes that many adolescents today find themselves cut off from their parents due to a communication gap, and a lack of care, love, guidance and understanding. They see a Rave as an attempt to create a new and better culture, incorporating the ideals of peace, love, unity and mutual respect (PLUR).

Rave culture as a whole is barely conceivable without drugs. For some, this makes the idea of Rave culture a contradiction in terms. Reynolds (1998:xix) states that one might define *culture* as something that ‘tells you where you came from and where you are going, something that nourishes the spirit, imparts life wisdom and generally makes life habitable’. Rave therefore provokes the question: is it possible to base a culture on sensations rather than truths, and fascination rather than meaning?

Collin (1997:280) notes the difficulty in overstating the impact that Ecstasy has on young people’s view of drug-taking. It is, many believe, not only an alternative to alcohol and tobacco, but a less-harmful alternative. Ecstasy appears to be socially acceptable to many who frown on the use of other illegal drugs. To the thousands of young people who have never taken illegal substances, Ecstasy’s harmless appearance is the opposite of everything they have ever been told about drugs. Ecstasy does not have to be smoked, injected or even sniffed. ‘It was literally an easy pill to swallow and it came packaged, not as a drug cult but as the ultimate entertainment concept with its own music, clubs and dress codes – and to many it was the euphoric peak of a lifetime’ (Collin 1997:280).

McDermott (1991:109) reports that ‘individuals develop a strange relationship with Ecstasy, a different relationship than with other drugs. Because they have such a good time on Ecstasy and it makes them feel so benevolent, there is a sense of “Well, this isn’t a drug, or if it is, it is a very



benign substance''.' The special relationship with Ecstasy as a harmless, weekend, party drug opened up a whole new range of people to 'chemical romance' who may previously never have entered the illegal drug world (Henderson 1997:52).

Society's stereotypical portrayal of all drug users as sad, incorrigible victims is not reflective of ravers. Young people who take Ecstasy at Raves are not necessarily drop-outs or deviants. Almost all of them are perfectly ordinary, healthy young people from all social classes who maintain a high degree of functionality in daily life (Parker 1995:04) be it at school, university or in their professions. Educated, middle-class people – doctors, lawyers, psychologists, teachers, journalists and information technology specialists – enjoy Ecstasy. It is important to recognise their diversity and the variations of their life experiences.

'One of the central dynamics of Ecstasy culture is the attempt to recreate the initial euphoria, to relive the exhilarating high, to chase the thrill of the rush. This has produced a recreational drug culture on a scale bigger than any... this century' (Collin 1997:280). According to the South African Narcotics Bureau (SANAB) (1998), Ecstasy is taking over the drug market in South Africa. The lack of information regarding Ecstasy amongst its users can be portrayed as a danger in itself. Reynolds (1998:190) points out that the craving for heaven on earth almost always leads on to a dark side phase of drug excess and paranoia. Because the original euphoria of the early Ecstasy experience never really returns, users are tempted to increase the dose, which only increases the speediness and the unpleasant side-effects.

By 1996 in South Africa (1991 in the UK), things began changing both culturally and chemically, as the initial 'innocence' of the Rave scene began to fade. Recession and increased economic uncertainty made it the perfect time for drug excess and escape. However, taken too often, Ecstasy loses its special appeal and many users may get drawn into compensatory polydrug use, taking other substances to mimic the effects originally achieved by MDMA. A large number of ravers began to explore a wide range of legal and illegal psychoactive stimulants, taking them in any and every combination and knowing very little about their effects both in the short and long term. These ranged from alcohol to amphetamines (speed, whizz), cocaine (coke, charlie, schnarf), LSD (acid, candy), ketamine (kit kat, special K), gammahydroxybutyrate ((GHB), liquid E), amyl nitrate (poppers, rush), marijuana (grass, spliff), antidepressants such as fluoxetine (Prozac) and sertraline (Zoloft), tranquillisers such as valium (V), 'natural highs' such as cloud 9 (herbal Ecstasy) and guarana, midnite flite (ephedrine based), rohypnol (roche, roofies), diet pills (ThinZ, Dietene) and *regmakers* (caffeine pills) and reactivan – anything to heighten the intoxication; to get further 'out there'. People no longer talked about 'getting on one' (getting 'high' on one pill) but rather, 'getting off my face' (ingesting

more than one pill combined with other drugs) (Collin 1997:282). Rave culture no longer appeared to be driven by MDMA alone. It had become a polydrug scene. Young people were becoming drug connoisseurs before they were legally adults at the age of 21.

Some began to realise that Ecstasy was not the wonder drug they had once believed it to be. People were ending up in hospital after long nights on the dance floor. The very drug which promised pleasure can and did actually kill (Collin 1997:282). The numbers were extremely small but the perception of Ecstasy as a safe recreational drug was being examined seriously. Henry (in Henry, Jeffreys & Dawling 1992) noted that Ecstasy was widely misrepresented as being safe. He went on to warn that the deaths, however small in number, might be an indication of a far worse catastrophe in the future. 'These few people who have died are tragic, but the critical factor is the possibility of long-term damage. What we have going on at the moment is a massive experiment, and we will only know the full answers in years to come' (Henry, Jeffreys & Dawling 1992:385).

Irrespective of certain Ecstasy-related fatalities, namely Britain's 18-year-old Leah Betts (1995) and Durban's 20-year-old Deeanne Groenewald (1998), death was not even enough to stem the tide. Some clubbers interviewed in the popular British dance magazine *Mixmag* (1996:23) confirmed this. Yes it was tragic, people responded, but some kind of 'freak accident' would not put most of them off swallowing another pill that weekend. 'There've been plenty of deaths,' said one respondent, 'you just go out and do it the next weekend. I know the risks and I am willing to keep on taking them.' Many Durban clubbers shared the same sentiments.

Because Ecstasy is illegal, there is no control over what the pills contain. Young people are ingesting pills despite not knowing what the quality of the pill is. There is no guarantee that any of them is Ecstasy. They choose to take the risk anyway. Henry (in Collin 1997:286) aptly delivered the catch phrase: 'Taking Ecstasy is like playing Russian roulette.' What is being sold as Ecstasy is seldom MDMA. Consequently, the finger is pointed at the dealers and manufacturers who are accused of cutting pills with everything from heroin to rat poison.

According to Brian Boucher (1998), senior superintendent of Point Road police station in Durban, 'there is a shortage of MDMA, so drug dealers are mixing E with other drugs, which is making it more dangerous'. Jan van der Merwe (1998), assistant director of the South African National Council on Alcoholism and Drug Dependence (SANCA), cites that 'as well as strychnine, backstreet drug manufacturers are known to mix arsenic, heroin, cocaine, LSD and animal tranquillisers with the basic ingredients'. This reinforces Ecstasy users' commonly held belief that contaminated pills, and not MDMA itself, are dangerous (Collin 1997:288).



Malcolm Brown (1996), the UK drugs liaison officer to the South African Police Service, affirms that the adulteration of Ecstasy has always occurred in the UK. Adulteration is often with innocuous substances, but it is not uncommon for Ecstasy to be mixed with cocaine, amphetamine, ephedrine and even caffeine. Sometimes methylenedioxyamphetamine (MDA), methylbenzodioxylbutanamine (MBDB), methoxymethyldioxyamphetamine (MMDA) and methylenedioxyethamphetamine (MDE) are used instead of MDMA (Eisner 1989:150–156) and are sold as Ecstasy to the unsuspecting user. (See Figure 1.1 on page 8.)

Although the purity of Ecstasy fluctuates, the general rule today, according to Reynolds (1998:xxx), appears to be that one has about a 10 per cent chance of buying a total dud (usually containing decongestants, antihistamines or harmless inert substances) and about 66 per cent likelihood of getting a variable dose of pure MDMA. The rest is taken up by pills that contain MDMA-related substances. Instead of making ravers more careful, the uncertainty of supply seems to have the reverse effect. Ravers keenly assume that they have been sold a low-grade product and take more pills to make up for it – resulting in the collective moan, ‘E’s are shit these days, you have to take a few of them to get on a buzz.’

Reynolds (1998:xxx–xxxii) maintains that excessive routine use coupled with Ecstasy’s dwindling returns forms a vicious circle – a negative synergy. The individual’s experience of Ecstasy is downgraded. On the collective level, Ecstasy or Rave scenes lose their happy, peaceful ‘vibe’ and become a ‘soul-destroying’ rut. This utopian/dystopian debate inherent in Rave culture led Reynolds (1998) to coin some new quasi-pharmacological terms: ‘vitalyst’ (from the words *vitalise* and *catalyst*) and ‘obliviate’ (from the words *oblivion* and *opiate*). These terms describe the drug experiences rather than the properties of MDMA itself; the same drug if abused, can cross the line between positive and negative (Reynolds 1998:xxxii). Ecstasy is not conducive to regular and frequent use. Tolerance develops to the desired positive effects of the drug while negative effects increase (Solowij, Hall & Lee 1992:1162).

Ecstasy starts out as a ‘vitalyst’: one feels more energetic, alive, confident and closer to others. On the macro level, Rave scenes in their early days are filled with vibrance, PLUR and a ‘we’re gonna change the world’ idealism. However, with regular, uncontrolled use or abuse, Ecstasy can become just another ‘obliviate’ like alcohol and narcotics: something that ‘numbs the soul’ and transforms Rave scenes into escapes from reality (Reynolds 1998:xxxii). This utopian/dystopian shift is a recurring theme experienced by successive Ecstasy generations all over the world (Reynolds 1998:xxxii).

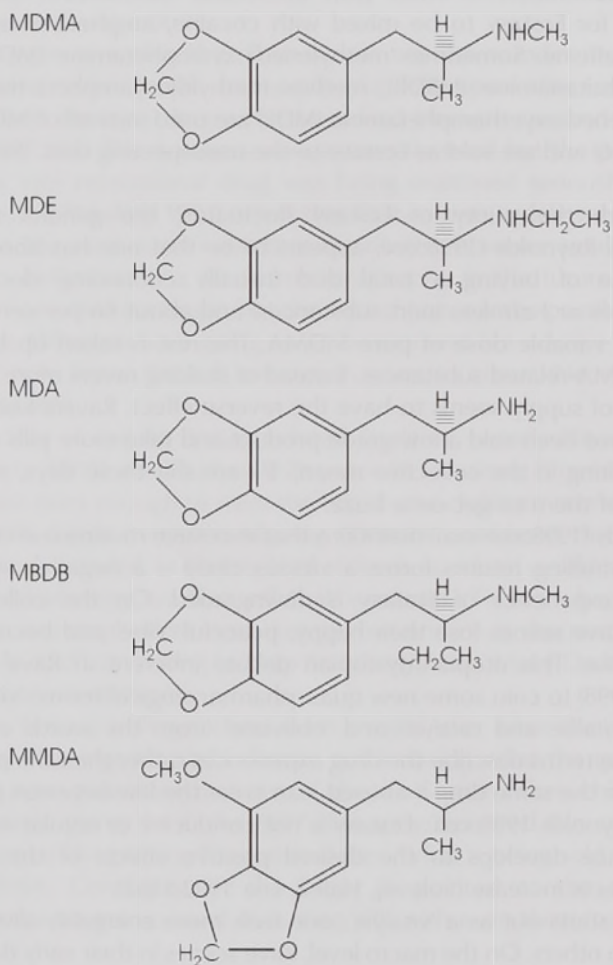


Figure 1.1: Chemical structure of MDMA and related substances



## 1.3 STATEMENT OF THE PROBLEM

As mentioned previously, the central problem pertinent to this investigation is adolescent Ecstasy use at Raves. Adolescence is a phase of life during which dramatic physical, cognitive and social development and change come about. Adolescents are therefore exposed to a wide range of stress-inducing factors. Apart from the irritability and inattentiveness that excessive stress may cause, increased smoking, drinking or drug use are some of the self-destructive behaviours in which adolescents may engage. Ecstasy use causes not only physical and psychological problems in the becoming and development of adolescents, but may also influence their self-concept, academic performance, concentration and learning abilities. The use of the drug can also give rise to a number of social problems that include relations with family, school or work, the law and possible personality changes. However, the extent to which these problems should be considered as drug problems rather than normal adolescent rites of passage is arguable and, as Saunders (1997:39) points out, often depends on highly subjective criteria.

Teachers as secondary educators are only surpassed by parents in the extent of their close involvement in the adolescent's development. They are therefore ideally positioned to identify the aforementioned influence of Ecstasy and to lend assistance. However, in order to offer assistance to the child who is taking Ecstasy, both parents and teachers must be sufficiently knowledgeable about Ecstasy use and be able to identify it in adolescents.

### 1.3.1 *Subsidiary problems*

- Young adolescents use the drug recreationally.
- Many young people appear dependent on Ecstasy to have fun.
- Young users believe that Ecstasy is a 'safe' drug.
- There has been an escalation in the number of Ecstasy pills consumed per occasion.
- There are risks involved in taking Ecstasy.
- The Ecstasy pills themselves may not contain MDMA.
- The long-term effects of Ecstasy (MDMA) are still unknown.
- Ecstasy is easily available at Raves.
- Raves expose young people to drugs.
- Rave participants perceive Ecstasy use as an accepted part of the night out.
- Ecstasy users may develop into polydrug users.

## 1.4 OBJECTIVE

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The primary objective of this study is therefore:

- to develop an awareness of adolescent Ecstasy use at Raves, and provide educators with accurate, factual information regarding Ecstasy use and Rave participation so that users may be helped.

## 1.5 DELIMITING THE AREA OF INVESTIGATION

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To identify young Ecstasy users, however, acceptable definitions of the terms *adolescent*, *youth*, *Ecstasy* (MDMA) and *Rave* must be formulated. The reasons for Ecstasy use will also be examined, as will the manifestation or effects and personal accounts or experiences of actual Ecstasy use in the adolescent.

A clear definition of concepts is necessary in order to preclude confusion and vagueness in the following chapters.

## 1.6 DEFINITION OF CONCEPTS

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### 1.6.1 *Methylenedioxymethamphetamine (MDMA)*

This illegal substance is a semi-synthetic chemical compound scientifically known as *methylenedioxymethamphetamine* and commonly known as *Ecstasy*. MDMA is a member of the phenylethylamine family of drugs, related both to mescaline and amphetamine. It is often described as a stimulant and/or a hallucinogenic (Eisner 1989:04). The primary effects are a 'positive mood state' and feelings of intimacy and closeness. The secondary effects are the stimulant effects of energy and activation, and psychedelic effects of insight and perceptual sensual enhancement (Solowij, Hall & Lee 1992:1161). The structural activity of this drug is so different from others that, it has been argued, the drug deserves a new category. Terms that have been suggested to describe this category include *empathogen*, from the drug's capacity to evoke a sense of empathy, and *entactogen* from the Latin word meaning 'to touch within' (Eisner 1989:34).

## **1.6.2 Ecstasy**

Ecstasy comes in tablets, capsules and occasionally white powder. The form of the tablets and capsules – their colour, shape, size and pictograms stamped on them – change all the time as the manufacturers try to evade the law (McFadyean 1997:60). The tablets often known as 'E' have a range of other names: love doves, killers, apples, VW, tulips, disco biscuits, Mitsubishis, white diamonds, Mercedes, one two five, clovers, sunshines, e-mails, dolphins, playboys, stars, pink champagnes, euros, 007, supermen – to cite a few.

## **1.6.3 Rave**

A Rave usually refers to an all-night dance party which is open to the general public, where loud 'techno' music is played and many people partake of different recreational drugs, although the last-mentioned is far from necessary. A large part of the concept of Raves is built upon sensory overload – a bombardment of audio and very often visual stimuli are brought together to make people feel as though they are elevated into an altered state of consciousness (Brown & Behlendorf 1995:03).

## **1.6.4 Adolescence**

*Adolescence* is the developmental phase between childhood and adulthood. The onset of adolescence is a physiological phenomenon (puberty) while its end is culturally determined (adulthood). Although it is difficult to delimit the adolescent phase in terms of chronological age, it is generally accepted that it starts between the ages of 11 and 13 years, and usually ends between 17 and 22 years (Gouws & Kruger 1996:03). This period can be subdivided into early (age 10–14), middle (age 15–17) and late adolescence (age 18–22) (Seifert, Hoffnung & Hoffnung 1997:333).

## **1.6.5 Adolescent**

For the purpose of this study adolescents will therefore be viewed as youths on their path to adulthood. They are total, complete individuals, whose own feelings and perspectives influence their own personal goals within their own environments, as each lives as a member of society (Manaster 1989:14).



## 1.6.6 Youth

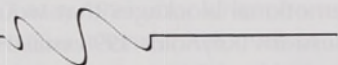
Many post-adolescents enter youth as a stage of life before proceeding to early adulthood. Youth is a distinctive period of growth devoted to developing a self-identity, namely figuring out who you are and who you want to be (Seifert, Hoffnung & Hoffnung 1997:409).

## 1.6.7 Early adulthood

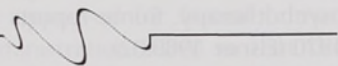
Early adulthood is a period of assuming adult roles, earning a living and taking on the responsibilities of a household. These changes usually occur some time in the twenties but there is considerable variability (Seifert, Hoffnung & Hoffnung 1997:409).

## CHAPTER 2

# METHYLENEDIOMETHAMPHETAMINE (MDMA OR ECSTASY)



### 2.1 A BRIEF HISTORY



MDMA was first synthesised and patented in 1914, shortly before World War I, by the German pharmaceutical company Merck (Cohen 1995:1138). One version of the history of MDMA maintains that the drug was briefly prescribed as a slimming aid and another that it was initially produced as an appetite suppressant for German troops. If the latter is accurate, MDMA's aggression-reducing, empathy-inducing effects would quickly have disqualified its use in combat situations (Reynolds 1998:xxii). Although MDMA is widely believed originally to have been synthesised as an anorectic, the actual patent does not make mention for such use (Cohen 1995:1138).

The modern history of MDMA begins with its rediscovery in the early 1960s by Alexander Shulgin, widely regarded as 'the stepfather of Ecstasy' (Saunders 1997:07). Shulgin was then a biochemist working for Dow chemicals and following an interest in psychedelics on the sly. He later opened his own government-approved laboratory in San Francisco, dedicated to the synthesis of new psychoactive substances (Reynolds 1998:xxiii). Shulgin synthesised myristicin into MDMA in 1962 by extracting it from the oils of nutmeg and mace (Redhead 1993:08).

Not until the 1970s did MDMA become popular for its therapeutic and recreational qualities. Among those who noted the potential of MDMA the fear existed that it might become a 'street drug' as LSD had and that it might quickly be banned (Eisner 1989:02). Those who experimented with MDMA, many of whom were psychotherapists, attempted to control the spread of information about the drug as well as the substance itself. They hoped that enough informal research could be done before it became public to prevent it from becoming illegal. MDMA advocates hoped to restrict the use of the drug to clinically supervised sessions, while gradually campaigning for MDMA's medical legitimacy (Eisner 1989:02).

In the late seventies and early eighties, MDMA gained popularity as being an adjunct in counselling sessions. Therapists would administer the drug to their patients in an effort to facilitate the entire therapeutic process (Cohen 1995:1138). MDMA was reported to increase self-esteem, elevate mood, increase self-insight and enhance empathy (Elk 1996:350). Used in marriage therapy and psychoanalysis, the drug proved highly beneficial. Therapists claimed that a five-hour MDMA 'trip' could help the patient work through emotional blockages that would otherwise have taken five months of weekly sessions (Reynolds 1998:xxiii). However, its euphoria-inducing effects could not be hidden for long. Some of the same psychoactive qualities that made MDMA popular as a potential therapeutic aid in psychotherapy also made it appealing as a social recreational drug. Ecstasy had already crept out of the 'charge' of psychotherapy. Some reports of early underground batches start as early as 1970 (Eisner 1989:02).

Instead of being used in bonding sessions between couples or as a tool of personal discovery, Ecstasy proved to have other more appealing uses. When large numbers of people took Ecstasy together, the drug 'catalysed a strange and wondrous sense of collective intimacy, an electric sense of connection between complete strangers' (Reynolds 1998:xxiv). By the early eighties, an Ecstasy club scene had developed in Texas and MDMA was becoming an increasingly popular 'legal high' throughout the USA, replacing cocaine as the drug of choice (Saunders 1997:09).

Still in the early 1980s, several animal studies suggested that MDMA may cause neurotoxicity. With these findings, the American Drug Enforcement Administration (DEA) ordered a crisis hearing concerning the potential risks associated with MDMA ingestion. In 1985 MDMA was placed into the most restrictive of all drug categories in the USA, namely Schedule 1. (In South Africa Schedule 8 is the most restrictive drug category.) Also because of its structural similarity to MDA, which had earlier been linked to damaging serotonin-producing neurons in laboratory animals, the DEA believed that similar destruction could occur in humans, therefore possibly eliciting long-term side-effects (Cohen 1995:1138).

A great amount of uncertainty continues to exist regarding the quick scheduling of MDMA. It is widely believed that the decision to ban the drug was founded purely on animal studies and speculation regarding potential dangers with human use (Cohen 1995:1138). The fact that MDMA was declared illegal has had wide-ranging consequences, such as preventing the drug from being used legally by therapists, thereby making responsible research almost impossible. A further consequence was the reduction of the quality of the drug, which could then only be sold on the street, since demand was now met by clandestine laboratories and the drug was distributed through the criminal



network. Criminalisation, however, did not prevent the popularity of the drug from spreading worldwide (Saunders 1997:11).

By 1988, Ecstasy reached the Spanish holiday island of Ibiza. Here, the combination of Ecstasy with dancing to loud, upbeat electronic music in a night-life atmosphere was 'invented'. Ecstasy had become the preferred party drug. This combination spread from Ibiza to England and the Netherlands in particular, where a new youth culture, the Rave culture, emerged (Saunders 1997:11). In South Africa, MDMA was legal until 7 May 1993 after which it was taken up in Schedule 8 of the Medicines and Medicines Control Act, 1965 (Act 101 of 1965) (South African Police Ecstasy Drug Conference 1996). Since the use of MDMA has not been proven safe under medical supervision, there is currently no accepted medical use for MDMA and it remains a controlled substance (Elk 1996:350). In 1994 MDMA was approved for formal human research by the American Food and Drug Administration (FDA) so that the possible dangers of recreational use of this illegal drug could be addressed (Elk 1996:354).

## 2.2 CLASSIFICATION OF THE MDMA DRUG

The primary effect of Ecstasy is to induce a 'positive mood state' which includes feelings of intimacy and closeness to other people. These effects characterise and distinguish Ecstasy from other classes of drugs, especially those with which it has most often been compared, namely the amphetamines and hallucinogens. It seems that Ecstasy shares the properties of both classes of drugs concerning its secondary effects, and in terms of the frequency and severity of its side-effects (Solowij, Hall & Lee 1992:1169). The amphetamine-like effects of Ecstasy are its secondary stimulant effects of energy and activation. The hallucinogen-like effects of Ecstasy are its secondary psychedelic effects of insight and enlightenment, heightened sensitivity, and mild perceptual and sensual alterations (Solowij, Hall & Lee 1992:1169).

Ecstasy is an appealing drug to recreational drug users in that it provides an 'added bonus'. Solowij, Hall & Lee (1992:1170) maintain that for those looking for predominantly stimulant effects, it also induces the positive mood, euphoric and intimacy effects. For those looking for an enlightened experience or possibly emotional therapy and insight, Ecstasy offers feelings of intimacy and closeness to others plus the stimulant-like alertness, talkativeness and energy. Additionally, it provides 'noetic' feelings, that is, the experience of seeing the world in a fresh way as if for the first time – as a child sees it (Eisner

1989:03). Furthermore, it is a drug experience in which one feels that one can stay in control of one's thoughts and behaviour rather than the drug being in control (Solowij, Hall & Lee 1992:1170). According to Shulgin and Nichols (in Eisner 1989:02), 'the drug appears to evoke an easily controlled altered state of consciousness, with emotional and sensual overtones'. More recently, similar reports were given as grounds for choosing Ecstasy over the more 'mind-bending' drugs such as LSD and ketamine.

## 2.3 DOSAGE AND MODE OF USE

MDMA is a white powder which is most commonly administered orally as a pill or capsule. The oral method is generally preferred because it produces the longest, smoothest high with the least amount of stimulant side-effects (Solowij, Hall & Lee 1992:1165). People do, however, experiment with different ways of taking Ecstasy. Injecting (although rare) was reported as having the quickest onset and producing a more intense but shorter-lasting experience. Snorting was reported as being quicker to take effect but shorter lasting, while a suppository had a slow onset but produced a more intense and prolonged experience (Solowij, Hall & Lee 1992:1165).

The effectiveness threshold is around 30 mg and toxic effects begin to increase sharply over the 200 mg dose level (Erowid 2000:01). The usual dose ranges from 75 mg to 150 mg (Randall 1992:1506), with 125 mg being about average, depending upon the person's weight (Beck & Morgan 1986:293). The more he or she weighs, the more must be taken to have the same effect. A complicating factor is that each individual responds idiosyncratically to a given dose of MDMA. Some are very sensitive, while others might be resistant to its effect on even high doses. (See Table 2.1.) This may be due to variations in metabolism or to psychological factors (Eisner 1989:113). Great variations in potency have been reported by laboratory analysis of street samples ranging from 16 mg to 150 mg, which indicates quality and dose control issues. The result of this inconsistency in dosage may be acute intoxication or fatal overdose (Elk 1996:351).

MDMA is an unusual drug in that there is a small ratio between its threshold dose and a dose that is too large. A dose larger than 200 mg will produce an MDMA experience, but one more like that of amphetamine – 'a jittery, anxiety-provoking stimulant high' (Eisner 1989:113–114). The 'loved-up' effect of the drug is lost at these high dosages. A very high dose might be physically harmful or even lethal. Under no circumstances should anyone take a dose over 250 mg (Eisner 1989:114).



Table 2.1 Dosages for pure MDMA in humans

Dosage	Quantity
Threshold	30 mg
Light – optimal for small or sensitive people	50–75 mg
Common – optimal for most people	75–125 mg
Strong – optimal for large or insensitive people	125–175 mg
Heavy – required by few (side-effects increase)	200 + mg
Lethal dose (LD) 50	106 mg/kg or ~6,000 mg

Note: The estimated oral LD 50 for MDMA in tested animals as noted in Table 2.3 is 106 mg/kg, that is, 106 mg of MDMA per kilogram of weight of the tested animal. The effective oral human dose is about 2 mg/kg of weight. Thus there appears to be a comparatively large margin of safety in the use of MDMA in humans – the LD50 is 53 times the effective dose in humans.

Key: \*LD50 = dose that will kill 50 per cent of the tested animals

(Source: Erowid 2000:01 [http://erowid.org/chemicals/mdma/mdma\\_dose.html](http://erowid.org/chemicals/mdma/mdma_dose.html))

At times a small quantity of MDMA will be ingested as a 'booster' after the initial oral dose begins to wear off. This is done to prolong the drug experience. However, the continuous use of boosters generally leads to great fatigue the next day (Beck & Morgan 1986:293). The booster dose can range in size from 40 mg up to the size of the initial dose. A dose between 75 mg and 100 mg has been used. The booster is usually taken about one hour after the onset of the effects of the first dose. Sometimes a second booster dose is taken in another hour. However, a second booster usually does not have the desired effect of enhancing the experience. Instead, the taker is often made to feel uneasy, 'jumpy' and sometimes confused by this third dose with little of the pleasant effects of the first two. This characteristic is one of the reasons why MDMA is not prone to abuse (Eisner 1989:114). However, this certainly does not mean that Ecstasy is not abused by young people.

The cost of MDMA in South Africa has ranged from R50 to R120 a pill, depending upon availability and whether the source is known or not.