

Considering the Recreational Benefits of Currently Prohibited Drugs



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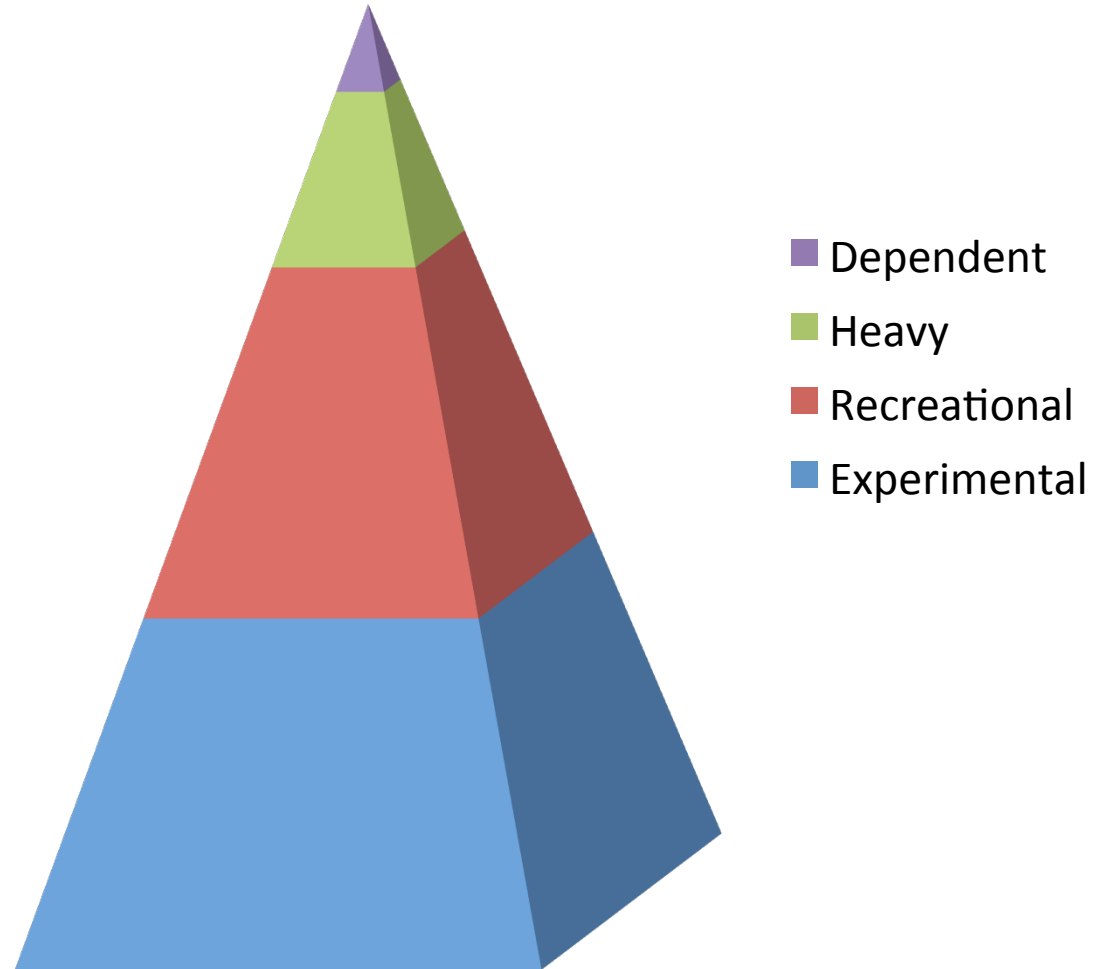
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Patterns of Drug Use



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Introduction

Benefits of drugs have often been neglected:

Research

- Deficits Model (cf. Karlsson, 2010)
- Pathology Model (cf. Mugford, 1988)
- Pleasure erased (e.g., Duff, 2008; Moore, 2008)

Treatment

- Motivational Interviewing



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Approach

Identify key literature using search terms:

- Functional Drug Use, Drugs and Pleasure, Psychonaut, Recreational Drug Use, Pharmacological Enhancement, drug instrumentalization

Use of reviews or studies specifically focused on discerning the benefits users report

e.g., Boys et al., 2001; Morgan et al. 2013, presentation of data from Global Drug Survey 2013



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Key Benefits

Euphoria

Increased Energy

Relaxation

Enhanced Interpersonal Connection / Sociability

Personal/Spiritual Insight

Enhanced Cognitive Performance

Changing body image (e.g. weight loss, muscle gain)

Self-Medication



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Players furious at video game bans: report

This story was published: OCTOBER 25, 2013

AUSTRALIA'S censorship agency was bombarded with complaints after it banned two violent video games, its annual report reveals.

Both games included drug use to enhance player abilities in the game, and one depicted implied sexual violence.

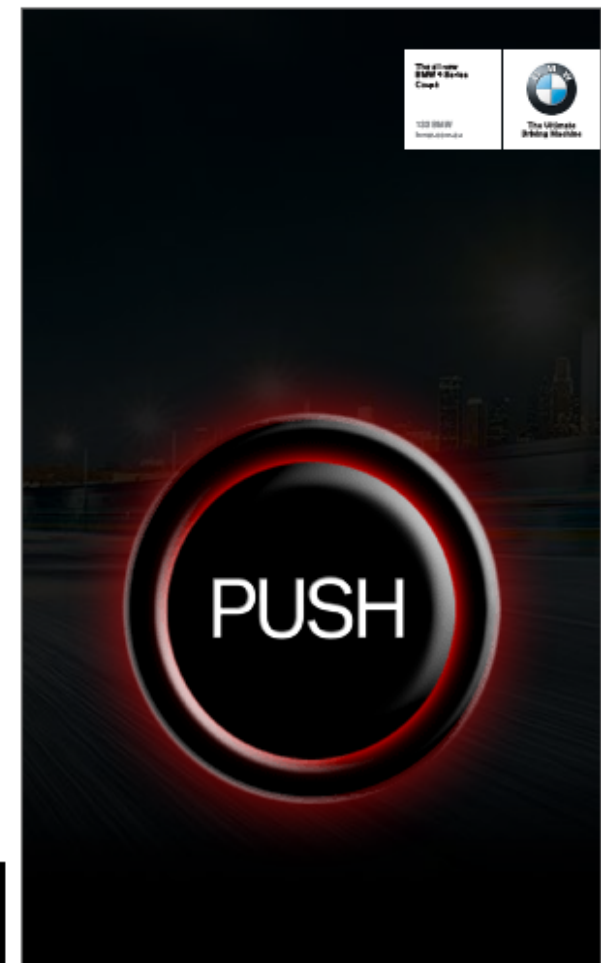
The Australian Classification Board considered 695 computer games during the year, with 291 receiving the G classification, making them suitable for viewing by anyone.

Two games were refused classification (RC), which means they can't be sold, hired, advertised or exhibited.

Saints Row IV, in which players seek to destroy the alien Zin empire, was given the thumbs down for implied sexual violence and use of "alien narcotics" to increase a player's in-game skills.

Classification guidelines bar any sexual violence or drug use related to incentives and rewards.

The same went for State of Decay, a zombie apocalypse game in which players can use morphine, amphetamines and other drugs to enhance in-game abilities.



Euphoria

Measurement?

— Pleasure: Social context?



“Happiness isn’t
good enough
for me. I
demand
euphoria!”



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Euphoria

Measurement?

- Pleasure: Social context?
- Euphoria: 78% of people re: MDMA (Boys et al. , 2001)
- High: Cocaine (Decorte & Muys, 2010)
- Intoxication: 77% re: LSD (Boys et al. 2001)
 - intoxication is “a positive and enhanced state: a form of bodily pleasure” (Keane, 2009)
- 2-CB (Caudevilla-Galligo et al., 2012)

Ecstasy in name, ... (Hunt & Evans, 2008)



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Increased Energy

Wakefulness:

- Dexamphetamine (Green & Moore, 2009)
- “Amphetamines”, “Ecstasy” & Cocaine (Boys et al., 2001; Morgan et al., 2013)

Increased productivity:

- Methamphetamine: chores, work longer, more time to socialise, drawing, sex (Lende, 2007)

Counteract other drugs:

- Dexamphetamine: “You can drink like a trooper” (Green & Moore, 2009)
- Methamphetamine: “If we’re too pissed we’d usually have it to straighten us out. I never go anywhere without my little vial, just in case. If somebody get’s too fucked on ecstasy or too pissed ...” (Pennay, 2012)



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Relaxation

Drug instrumentalization theory: evolutionary basis? (Muller & Schumann, 2011)

Cannabis:

- Relax: 97% (Boys et al., 2001) 92% (Morgan et al., 2013)
- Sleep: 78% (Morgan et al., 2013)

Opiates: 50% (Morgan et al., 2013)

Stimulant drugs are also used for relaxation

MDMA (Hinchliff, 2001)

Improved Social Connectedness

Cocaine:

- “Facilitating communication” 48% of respondents (Decorte & Muys, 2010)
- “Sociability” 52% of participants (Morgan et al., 2013)

Ecstasy described as social disinhibitor:

- Highest ranked drug re: sociability in Morgan et al. (2013)
- ‘improved ability to communicate with romantic partners as well as a increased willingness to discuss their emotions and intimate experiences’ (Singer & Schensul, 2011, p. 1681)
- ‘positive consequences of ecstasy use included enhanced communication, strengthened relationship with people’ (Murphy et al., 2005)
- Ecstasy transforms connections with others – the social restraints are lifted by the effects of ecstasy (Hunt & Evans, 2008)
- These accounts fit with the use of MDMA to treat PTSD through reduced fear and increased capacity for intimate connection.



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Personal/Spiritual Insight

MDMA

- History of use to enhance effectiveness of psychotherapy
- MAPS trials indicate successful treatment of PTSD

Carhart-Harris & Nutt, 2010:

- 81% of 600 reported having had a 'spiritual experience' from a hallucinogen.
- Relief from symptoms of depression through personal/spiritual insight reported for LSD, psilocybin and MDMA.
- Benefits of LSD/psilocybin included improved insight, perspective, self-understanding, acceptance, sense of inner peace.

Griffiths et al. 2008 – Johns Hopkins psilocybin study

- Administration of psilocybin in 36 hallucinogen-naïve humans
- Psilocybin experience judged one of the most meaningful / spiritually significant of their lives at 14 month follow-up.



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Enhanced Cognitive Performance

Methylphenidate, Modafinil & Beta-blockers: 20% lifetime prevalence among 1,200 Nature readers (Maher, 2008)

Any non-prescribed substance: 24% Male 17% Female
German university students past 12 month use (Dietz et al., 2013)

Dexamphetamine, Methylphenidate, Modafinil: 2%, 7.7% & 2.9% lifetime use among Australian university students (Mazzanov et al. in press)

LSD: Creativity (Tupper, 2003)



Changing body image

Weight loss among female ecstasy users (Curran & Robjant, 2006; cf. Morgan et al. 22%)

Amphetamines: 23% (Boys et al.) 35% (Morgan et al.)

Cocaine: 6% (Boys et al.) 36% (Morgan et al.)

Cannabis: used medicinally for weight gain (Swift et al., 2005)



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Self Medication

Functional Drug Use

- 69% use Cannabis to improve mood (Boys et al., 1999)
- 74% use Cannabis to relieve anxiety & depression (Morgan et al., 2013)
- Reduced stress (for review, see Muller & Schumann, 2011)
- “Generation Rx” (Quintero & Nichter, 2011)

Drug instrumentalization

Mental Health → AOD use

- (e.g., PTSD, ADHD, Bipolar Disorder, Borderline PD, etc.)
- Lost salience in favour of “alleviation of dysphoria” model

Drug type ratings on benefits

- Global Drug Survey 2013 – data presented here with permission of Adam Winstock and Will Lawn – Thanks!
- Aimed to explore commonly used drugs' effects on 10 positive and 10 negative aspects.
- Which drug gives us the most benefits/pleasure with the least harm? (rated by users)
- 22,000 respondents globally



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Net Pleasure Index (NPI)

If used in the last year rate the drug.

Each item rated between 0 and 10.

10 = maximum positive effect.

10 = maximum negative effect.

Positives

Increase in mood (makes me feel happy) / confidence

Increase pleasure from social interactions / being with others

Increase in ability to relax and unwind

Increased enjoyment/capacity for sex or physical activity

Increase in energy/alertness

Increase in self-awareness and understanding

Increases and/or changes effects of other drugs used

Relief from pain and worries following use

Help me work/study/perform

Helps me cope with life

Negatives

Unpleasant physical effects when intoxicated

Unpleasant psychological effects when intoxicated including the way you are with other people

Doing risky things that place you or others at risk of harm

Feeling lousy / not being to function normally in the days after use

Negative effects on your ability to work/study/progress personally

Unwanted effects on physical health

Unwanted effects on mental health

Negative effects upon intimate/close personal relationships

Legal/criminal justice consequences

Money problems / worries related to your use of this substance



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Positive items (rated 0-10)

	<i>Top</i>	<i>Second</i>	<i>Third</i>
Increase in mood (makes me feel happy) / confidence	MDMA	Mushrooms	Cocaine
Increase pleasure from social interactions / being with others	MDMA	Mephedrone	Mushrooms
Increase in ability to relax and unwind	Cannabis	MDMA	GHB/GBL
Increased enjoyment/capacity for sex or physical activity	MDMA	Amphetamine	Cocaine
Increase in energy/alertness	Amphetamine	MDMA	Cocaine
Increase in self-awareness and understanding	LSD	Mushrooms	MDMA
Increases and/or changes effects of other drugs used	Ketamine	LSD	MDMA
Relief from pain and worries following use	MDMA	Cannabis	LSD
Help me work/study/perform	Amphetamine	Tobacco	Cocaine
Helps me cope with life	Tobacco	MDMA	Alcohol



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Negative items (rated 0-10)

	<i>Top</i>	<i>Second</i>	<i>Third</i>
Unpleasant physical effects when intoxicated	Alcohol	Ketamine	Mephedrone
Unpleasant psychological effects when intoxicated including the way you are with other people	Ketamine	Alcohol	Mephedrone
Doing risky things that place you or others at risk of harm	Alcohol	Ketamine	Cocaine
Feeling lousy / not being to function normally in the days after use	Mephedrone	Alcohol	MDMA
Negative effects on your ability to work/study/progress personally	Alcohol	Mephedrone	MDMA
Unwanted effects on physical health	Alcohol	Mephedrone	Amphetamine
Unwanted effects on mental health	Mephedrone	Amphetamine	Alcohol
Negative effects upon intimate/close personal relationships	Alcohol	Mephedrone	Amphetamine
Legal/criminal justice consequences	Cannabis	Cocaine	MDMA
Money problems / worries related to your use of this substance	Tobacco	Alcohol	Cocaine



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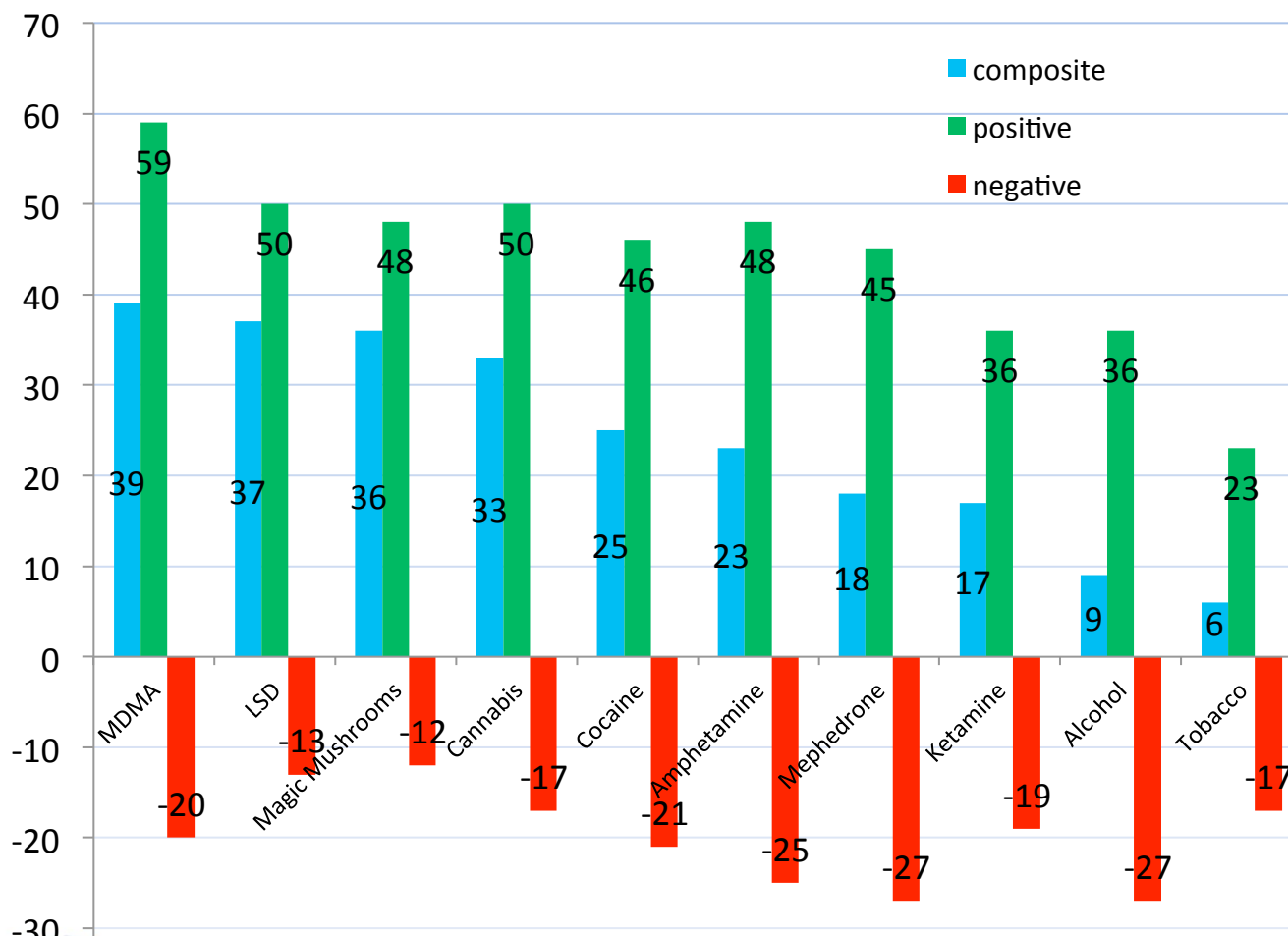


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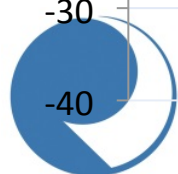


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Net Pleasure Index (NPI)



Drug	Approximate N
Alcohol	20,000
Amphetamine	3,000
Cannabis	13,000
Cocaine	5,000
Ketamine	2,000
LSD	3,000
Mushrooms	3,000
MDMA	8,000
Mephedrone	800
Tobacco	10,000



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Discussion

Beyond harm reduction:

- Without acknowledging understandings of benefits, we can't fully understand the ways drugs are used
- If you can't acknowledge benefits, harder to discuss moderate use strategies
- Interventions are more credible if benefits included.
- Resilience/Maximising benefits

Drug classifications do not reflect user or expert ratings of harms and benefits (c.f. Nutt, Morgan, GDS)

Role of “pathological narrative”



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Limitations – where to from here?

Problem with assigning effects to drugs alone –
need to remember drug, set, setting:

e.g., how to interpret net pleasure index given it is
pharmaco-centric?

Polydrug use (Hunt et al., 2009)

Overlapping benefits and blurred definitions

Bias inherent to self report

Accessing functional drug users for research?? –
stigma



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Thank You

“Most nations prohibit most drugs that could promote happiness, social capital, and economic growth; that most individuals underuse rather than overuse drugs; and that behavioral scientists could use drugs more effectively in generating hypotheses and collaborating empathically.” (Miller, 2011; Behavioral and Brain Sciences)

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(References cited are available upon request)



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