

Recreational Cocaine Use – does it cause psychological harm?

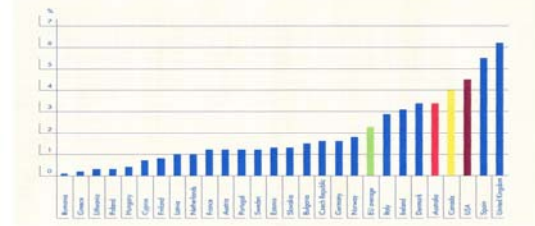
Soar K & Turner JJD

Recreational Drugs Research Team, UEL
<http://www.uel.ac.uk/psychology/research/drugs.htm>



Last year prevalence rates

Figure 2: Last year prevalence of cocaine use among young adults (aged 15–24) in Europe, Australia, Canada and the USA



Note: Data are from the last survey available for each country. The European average prevalence rate was calculated as the average of the national prevalence rates weighted by national population of 15- to 24-year-olds (2004), taken from Eurostat (2006) and Australian data have been calculated from weighted survey results in the age bands 15-19, 20-24 and 25-29 years respectively. See Figure QP3.20 in the 2010 annual report of the Australian Institute of Health and Welfare.

Sources: SAMHSA (2004), Center for Substance Abuse Treatment (2004), National survey on drug use and health, 2008; Eurostat (2006), Australian Institute of Health and Welfare (2010); 2009 National Drug Strategy Household Survey; identified findings; Drug statistics series No. 32; Call No. P40; 10/7; Canberra, 2010.

EMCDDA Annual Report 2010

Typical recreational user



- EMCDDA refer to as 'socially integrated users'
- Cocaine powdered form
- Intranasal (snorting)
- Occasional use:
 - Few times per month (Lundhal & Lukas, 2007; Kemmis et al, 2007)
 - Weekly (Kemmis et al, 2007)
 - Monthly consumption (1-4g) but not meet criteria abuse/dependence (Colzato et al, 2007,2008,2009)
- Middle class, educated and in full-time employment

Harmful?

- "very rare and much less severe for occasional, low dosage" with mental health problems "mainly limited to high dosage users" (WHO/UNICRI, 1995)
 - Health (physical & psychological) consequences associated more with dependent, cocaine injecting and crack users from marginalised groups
- BUT
- limited empirical research published assessing psychological effects in recreational users

Study 1: subjective effects (n=32)

Positive Subjective Effects

	%	N
Confidence	47	15
Talkative / chattiness	28	9
↑ energy	22	7
Alertness/stay awake	19	6
Sociability	19	6
Euphoria	19	6
Positive fun exciting feeling	19	6
Sexual arousal / improved sex	16	5
Happiness/↑mood	16	5

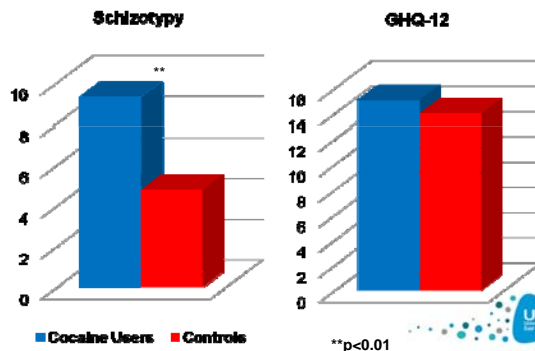
Negative Subjective Effects

	%	N
Nasal discomfort / blocked	38	12
Depression / ↓mood	25	8
Come down	25	8
Money spent	19	6
Arrogance / inflated ego	19	6
Paranoia	16	5
Exhaustion	16	5
Disrupted/reduced sleep	16	5
Anxiety	13	4
Headaches	13	4

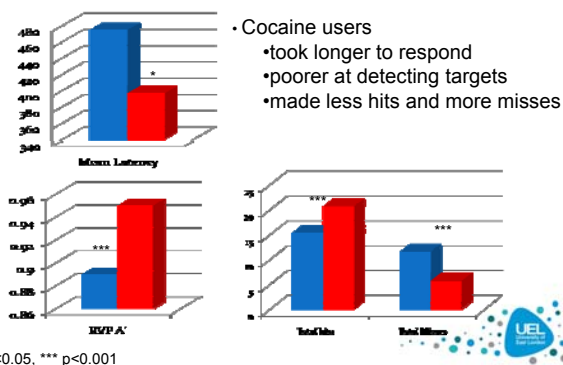
38% (n=12) reported problems attributable to their cocaine use, with 9% (n=3) having sought help for them

Study 2: psychological health

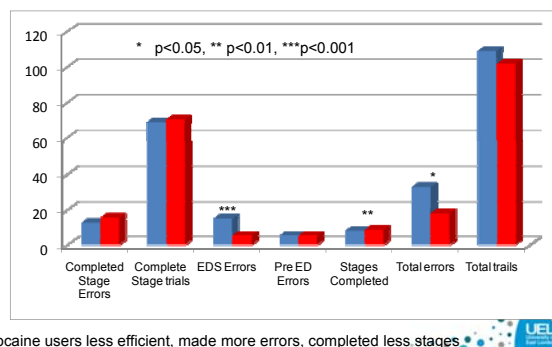
N= 17 cocaine, 24 non-cocaine



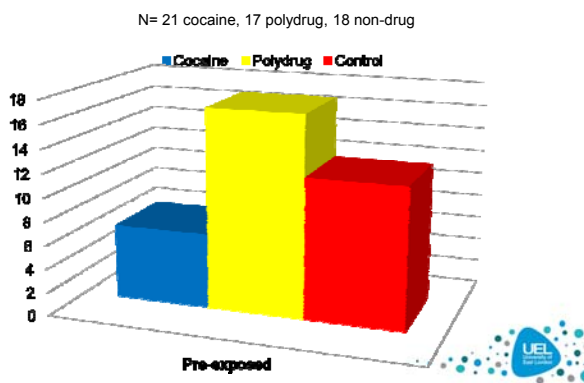
Study 2: Sustained attention



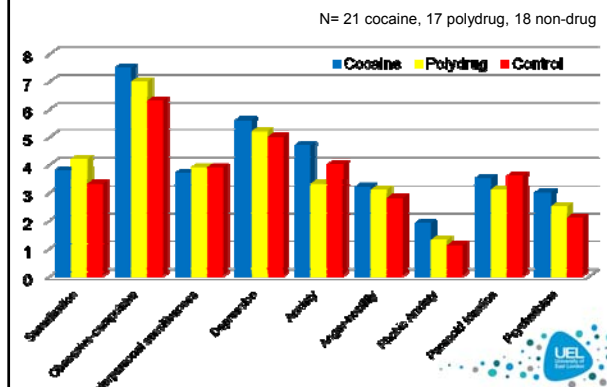
Study 2: executive function, rule acquisition and flexibility of attention



Study 3: associative learning



Study 3: Psychological Effects



Conclusions

- Recreational cocaine users report a range of both **positive & negative** effects associated with. most frequent:
 - Confidence
 - Nasal problems
 - Negative depressed mood
 - Comedown
- Despite negative subjective reports of paranoia, anxiety and depression, using more objective measures, cocaine users did not differ to controls on symptomatology
- Relative to controls, recreational cocaine users displayed:
 - Elevated levels of schizotypy
 - Impairments on a range of cognitive functioning:
 - Inhibitory control
 - Learning
 - Planning/organisational skills
 - Attention

Future

- Ascertain whether the lack of confidence is a predisposing factor for recreational cocaine use and subject to intervention
- 'Co-use with alcohol = Cocaethylene = Potentially toxic by-product formed in co-use of cocaine and alcohol = worse psychological effects???
- Are this recreational users at risk of becoming dependent users:
 - Is intranasal use a gateway to use of other routes and potential transition to 'dependent' use.
 - Body of research suggests cognitive impairments may contribute/lead to dependency issues
 - May be the lack of psychological problems is a 'protective' factor in moving from recreational to dependent use.

Acknowledgments

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- All participants



Patterns of cocaine use

	Study 1	Study 2	Study 3
Age of first use (years)	23.01 (4.50)	20.82 (3.54)	18.38(3.09)
Duration since last used	Not recorded	Weeks = 3.00 (2.68)	Months = 1.76 (1.55)
Occasions used in last month	1.10 (2.80)	2.35 (2.23)	1.19 (1.54)
Amounts used in last year	12.32 (35.83)	20.18 (19.08)	12.05 (11.94)
Lifetime consumption (no. of occasions)	39.19 (42.14)	264.57 (437.55)	73.33 (82.18)
Frequency of use (%):			
Weekly	3	18	5
Monthly	16	53	43
Every 3 months	9	12	48
Yearly	25	18	5
Other ??	47	-	-
Average use (grams) on each occasion	1.01 (1.46)	1.90 (1.07)	0.94 (0.56)
Amount spent (£) on each occasion	41.33 (72.02)	58.82 (45.23)	44.05 (25.67)
Severity of Dependence Score	1.06 (2.13)	3.53 (4.86)	

