

Accessing NPS & other drugs online:

motivations, experiences, drug market
implications and policy challenges

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Acknowledgements

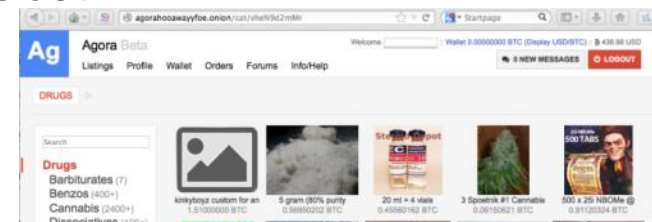
- Dr Adam Winstock for allowing us to use unpublished Global Drug Survey data
- Prof Mathew Allen – ideas and scholarship
- The anonymous participants of the Global Drug Survey and the Silk Road Project

Overview

- Context – clear/surface web and dark web
- Quantitative data on reasons for buying and not buying drugs from Silk Road
- New qualitative data
- Conclusions and implications

Context

- Surface web
 - Websites selling NPS
 - Drug discussion forums – largely info seeking
- Hidden web
 - TOR and Bitcoins
 - Silk Road and the newer drug cryptomarket places
 - Dynamic systems - FBI actions etc.



Internet as tool



Internet
as place

Internet
as way of
being

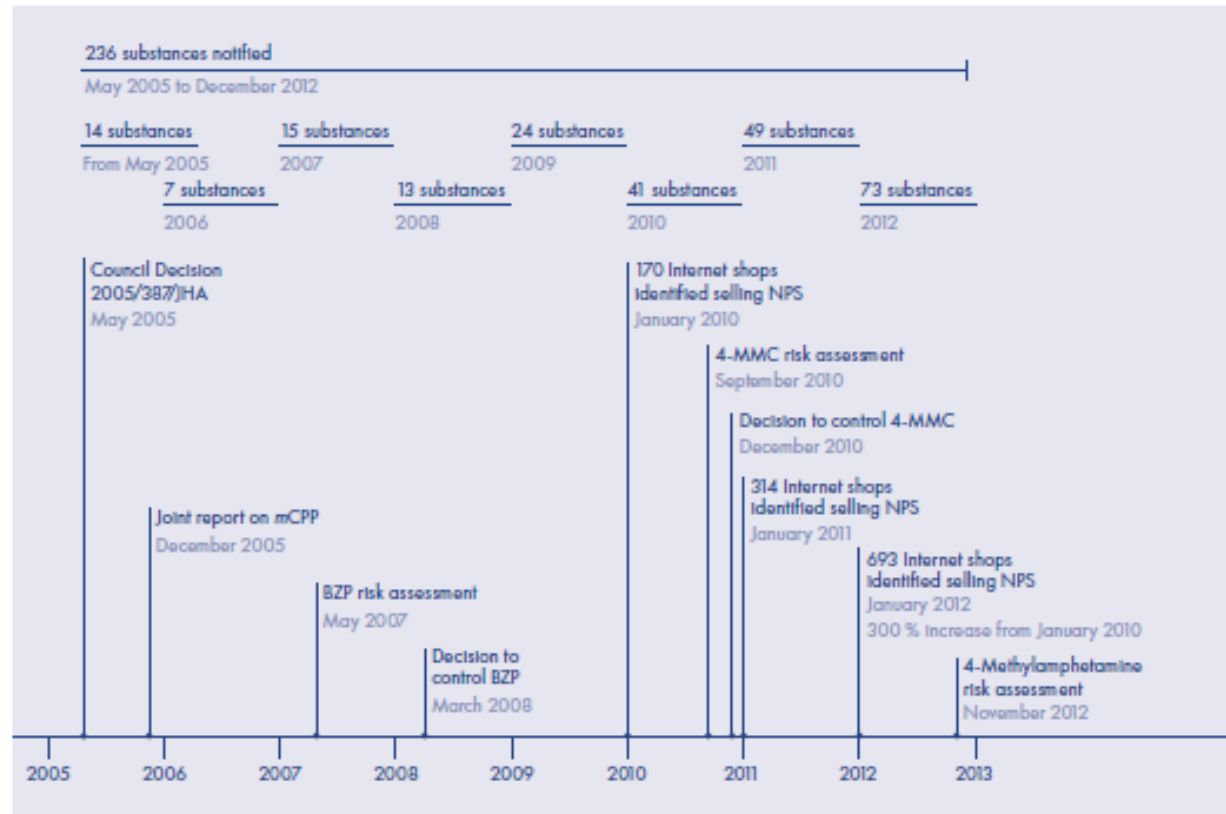
Annette Markham's three metaphors of the internet

Drug discussion forums

- Largely drug info sharing and seeking
- Drug seeking discouraged by moderators –
 - open, public
 - concerns re official pressure/actions
- Is complicated, both:
 - Harm Reduction
 - Counter public health - pleasure – ‘PMA sounds fun’
(See Barratt, Allen & Lenton 2014)
- Have/will DLE and official actions, e.g. increased surveillance of online behaviour, move people to dark net?

Accessing drugs on the surface web

Figure 27: Timeline of major developments and number of new psychoactive substances notified since Council Decision 2005/387/JHA came into effect in May 2005



Note: BZP, 1-benzylpiperazine; NPS, new psychoactive substances; 4-MMC, 4-methylmethcathinone (mephedrone). Internet shops identified by EMCDDA monitoring offered NPS/‘legal highs’ for sale and delivery to at least one EU Member State.

Source: EMCDDA.

Silk Road – what is it?

- The Silk Road is the most well known of, now, a number of online drug marketplaces, similar to eBay, with drug listings, vendor ratings, sales, a discussion forum, etc.
- Silk Road is accessed via Tor, through the hidden web, and drugs are bought using Bitcoin, an encrypted virtual currency.
- Tor & Bitcoin, used correctly, apparently make transactions untraceable.
- Drugs delivered through the postal system in ‘stealth packaging’.
- Normally, funds are only released to vendors when buyers receive their goods and are satisfied with them.



Silk Road timeline

The screenshot shows the Silk Road anonymous market website. At the top, there's a navigation bar with a camel logo, the text "Silk Road anonymous market", and links for "messages 0", "orders 0", and "account B0.00". A search bar is present with a "Go" button. On the right, there's a greeting "Hi, nique" and a "logout" link. A sidebar on the left lists various categories with item counts: Drugs (6,411), Apparel (245), Art (113), Biotic materials (1), Books (850), Computer equipment (26), Custom Orders (57), Digital goods (476), Drug paraphernalia (242), Electronics (72), Erotica (515), Fireworks (6), Food (4), Forgeries (50), Hardware (15), Herbs & Supplements (6), Home & Garden (5), Jewelry (54), Lab Supplies (16), Lotteries & games (71), and Medical (22). The main content area displays a grid of drug listings. Each listing includes a small image, a description, and a price. For example, one listing is for "INDOOR ORGANIC SOIL -14G- HASHMAN" priced at B2.96. Another is for "NORGE: 0.5g SUPERB KOKAIN!" at B2.37. A third is for "20G BEST QUALITY MEPHEDRONE EVER! LIKE" at B14.79. Other listings include "1 x ATEC Anadrol 50mg per cap. 50 caps" (B4.13), "10x 10mg Valium (Diazepam) - Ten Pack!" (B1.51), "LSD 100-110ug Blotter Paper x 5 (White Fluff)" (B2.54), "1500x Xanax 1mg Pfizer 'Upjohn purple footballs'" (B19.79), "4XBOMB FK'N EDIBLES!!! (MIX&MATCH.)" (B1.06), and "10gram MDMA crystals**Highest grade" (B6.60). On the right side of the main content area, there are sections for "News" and "Bookmarked items". The "News" section lists articles like "Closing the Armory", "A brand new look for Silk Road!", "The gift that keeps on giving", "Who's your favorite?", and "Acknowledging Heroes". The "Bookmarked items" section shows a listing for "Matrix™ MDMA ½ Gram... Pure & Uncut!" with a "remove" link.

- Online drug market place operated from February, 2011
- June 2011 Gawker article thrust into limelight
- DPR arrest and shutdown 2 Oct, 2013.
- Total number of drug listings:
 - 485 in June 2011,
 - 880 in November 2011,
 - 1159 in March 2012,
 - 6411 in March 2013
 - ~13,000 in October 2013



THIS HIDDEN SITE HAS BEEN SEIZED

by the Federal Bureau of Investigation,
in conjunction with the IRS Criminal Investigation Division,
ICE Homeland Security Investigations, and the Drug Enforcement Administration,
in accordance with a seizure warrant obtained by the
United States Attorney's Office for the Southern District of New York
and issued pursuant to 18 U.S.C. § 983(j) by the
United States District Court for the Southern District of New York



Silk Road 2.0



Silk Road
anonymous market

messages 0 | orders 0 | account \$0.000

Search

Go

Hi, i

[settings](#) - [logout](#)



Psychedelics 1868

2C-Family 181

4-ACO-Family 45

4-HO-Family 0

5-MeO-Family 0

NBOMe 230

LSZ 1

LSD 349

TMA Family 0

Shrooms 108

MET 1

LSA 1

Entheogens 0

DPT 6

DOx 28

DMT 87

Bufotenin 1

AMT 4

AL-LAD 7

Salvia 20

Alcohol 424

Apparel 384

Art 15

Biotic materials 2

Books 548

Computer equipment 26

Custom Orders 223

Digital goods 770

Drug paraphernalia 174

Drugs 14007

Electronics 49

Erotica 115

Forgeries 110

Hardware 14

Herbs & Supplements 3

Jewelry 131

Lab Supplies 26

Lotteries & games 21

Medical 6

Money 347

browsing psychedelics

sort by: bestselling

☐ ships to my region

☐ ships from my region



(10)Gram -GROUND- Cubensis Mush Shroom Powder by MUSHBUD -Shipping WORLDWIDE-

vendor: MUSHBUD

ships from: Canada

ships to: Worldwide

\$0.074567

[add to cart](#)



200ug Shiva LSD Blotter - 1

vendor: aKid

ships from: Undeclared

ships to: Worldwide

\$0.022696

[add to cart](#)



10 x 1000ug 25i-NBome Blotters HPBCD Complexed

vendor: DaHBome

ships from: United Kingdom

ships to: Worldwide

\$0.027519

[add to cart](#)

5/5/2014

Agora

agorahoawayyfoe.onion / cat/vheN9d2mMr

Welcome :: Wallet 0.00000000 BTC (Display USD/BTC) :: \$ 438.98 USD

0 NEW MESSAGES LOGOUT

Ag Agora Beta

Listings Profile Wallet Orders Forums Info/Help

DRUGS






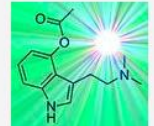



















Search

Drugs

- Barbiturates (7)
- Benzos (400+)
- Cannabis (2400+)
- Dissociatives (100+)
- Ecstasy (1400+)
- Opioids (500+)
- Other (200+)
- Prescription (700+)
- Psychedelics (1200+)
- RCs (200+)
- Steroids (300+)
- Stimulants (1300+)
- Weight loss (60+)

Main menu:

- Counterfeits (200+)
- Data (300+)
- Drug paraphernalia (20+)
- Drugs (9300+)
- Electronics (90+)
- Forgeries (200+)
- Information (900+)
- Jewelry (50+)
- Other (30+)
- Services (400+)
- Tobacco (80+)
- Weapons (100+)

 kinkyboyz custom for an 1.51000000 BTC	 5 gram (80% purity 0.56950202 BTC	 20 ml = 4 vials 0.45560162 BTC	 3 Spoetnik #1 Cannabis 0.06150621 BTC	 500 x 25i NBOMe @ 0.91120324 BTC
 4-AcO-DMT 100 mg 0.05922821 BTC	 25x Pacman's Ghost 0.27905599 BTC	 1 QP (114g) from NW 2.16410770 BTC	 5 x 20-22mg 2C-B 0.08428630 BTC	 0,5 gram of Colombian 0.13952799 BTC
 25g Legal HQ Spice - 0.27336097 BTC	 5g high-class Peruvian 1.13877625 BTC	 Custom order for P....15 0.63000000 BTC	 CocaParis's Pure 0.45560162 BTC	 3.5 Grams Mdma 0.36448129 BTC
 25x20mg Oxycodone 0.93398332 BTC	 500gr. 5-MeO-MIPT 9.11203243 BTC	 2.638g MDMA Crystal 0.21868877 BTC	 Bhang Bar Peppermint 0.06834024 BTC	 1 x SUBUTEX 0.06378422 BTC
 Symbiosis - 100 Pink 1.09344389 BTC	 Indian hand rubbed 0.36448129 BTC	 Snow White Organic 0.87931113 BTC	 1500 grams of pure 9.11203243 BTC	 1lb Medical-Grade Indoor 6.15062189 BTC

↑ numbers of online drug marketplaces

From Digital Citizens Alliance, DeepDotWeb, April 2014

Darknet sites at the time of the Silk Road seizure (10/2/13)	Drug Listings
The Silk Road	13,000
Black Market Reloaded	3,567
Sheep Marketplace	1,407
DeepBay	200
TOTAL	18,174

Marketplaces (Today)	Drug Listings	Total Listings	Weapons
Silk Road 2.0	13,648	17,192	No
Agora	7,400	9,158	Yes
Pandora Openmarket	5,249	5,812	No
Evolution	2,623	5,523	Yes
BlueSky Marketplace	1,740	1,833	No
New Markets			
Dark Bay	292	329	No
The Pirate Market	247	367	Yes
Outlaw Market	230	246	No
Tor Bazaar Alpha	205	252	Yes
Black Bank Market	201	239	No
White Rabbit Anonymous MarketPlace	194	256	Yes
TOTAL LISTINGS	32,029	41,207	

DARKNETMARKETS LISTING COUNT IS BOOMING: APPROACHING 50,000!

Posted by: DeepDotWeb April 20, 2014 in News & Articles 4 Comments













Like 3 Tweet 7 +1 1 Share 6 Submit

“The current number of total drug listings is 176% of pre-TSR take down levels. This growth has come with increased competition ...”

“Silk Road 2.0 is the market leader with a 43% market share. TSR had 71% at the time of its seizure.”

“Agora currently carries 26% of drug listings and has seen major growth in listings, as well as credibility, since the hacks of Silk Road 2.0 and Pandora. Agora further differentiates itself from Silk Road 2.0, Pandora, and BlueSky by offering weapons.”

The Hub forums

The Hub Forums			
General Discussion		Unread Posts	
	The Hub Discussion For the discussion of The Hub and marketplaces in general	4518 Posts 322 Topics	Last post by grams in Re: Grams New features on Today at 01:58:53 am
Child Boards: Feature Requests <small>new</small>			
	Security Tor, cryptography, anonymity, etc.	1139 Posts 113 Topics	Last post by playground in Re: usb encryption facil... on Today at 12:13:19 am
	Cryptocurrency Discussion of Bitcoin, Litecoin, and all other cryptocurrencies.	457 Posts 54 Topics	Last post by TheDude in Re: CampBX will steal yo... on May 01, 2014, 06:03:36 pm
	Shipping Discussion of shipping and stealth methods, receiving methods, etc.	117 Posts 15 Topics	Last post by dandanthecreamman in Re: how to complete a tr... on May 01, 2014, 07:33:54 pm
	Drug Safety Best practices, advice, etc	364 Posts 48 Topics	Last post by pulverkaeufer in Re: ENERGY CONTROL: DRUG... on May 01, 2014, 09:22:21 pm
Child Boards: Trip Reports <small>new</small>			
	Legal Discussion of various legal concepts and practices, advice, warnings, etc.	24 Posts 9 Topics	Last post by Boogie in Re: Driving with drugs (... on May 01, 2014, 06:10:28 am
	Off Topic Post anything here that is not related to other topics	4195 Posts 166 Topics	Last post by Ziggy in Re: **Official Spare Col... on May 01, 2014, 09:15:55 pm
Child Boards: Under The Bridge <small>new</small> , Tor Directory <small>new</small>			
Marketplaces		Unread Posts	
	New Marketplaces Discussion of Emerging or Developing Marketplaces.	614 Posts 48 Topics	Last post by Mr. Bill in Re: Cannabis Road: A Can... on May 01, 2014, 09:29:37 pm
	Vendor Review Discussion and Reviews of vendors across all marketplaces	2893 Posts 319 Topics	Last post by Damiel in Re: Aidoneus - US Domest... on Today at 12:12:24 am
	Agora Market Discussion of Agora Marketplace	909 Posts 105 Topics	Last post by RC4EveryOne in Re: Why is no one freaki... on May 01, 2014, 09:32:00 pm
	Pandora Market Discussion of Pandora Marketplace	204 Posts 42 Topics	Last post by RC4EveryOne in Re: The future of the ma... on April 20, 2014, 06:02:47 am
	The Silk Road Discussion of The Silk Road marketplace	1436 Posts 111 Topics	Last post by Anarcho in Re: Oracle's Memoirs on May 01, 2014, 09:26:25 am
	The Marketplace.I2P For discussion of the I2P based Marketplace	128 Posts 10 Topics	Last post by Rampa in Re: TheMarketPlace.i2p

The Hub forums

Drug safety discussion board

The Hub Forums » General Discussion » Drug Safety

Child Boards

	Trip Reports Sharing and Discussion of Trips with Various Substances	33 Posts 7 Topics	Last post by dandanthecreamman in Re: The DMT Club... Brea... on May 01, 2014, 07:24:01 pm
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Pages: [1] 2 3

[NEW TOPIC](#)
[NEW POLL](#)
[NOTIFY](#)
[MARK READ](#)

Subject / Started by		Replies / Views	Last post
	ENERGY CONTROL: DRUG TESTING SERVICE FOR DEEP WEB USERS new Started by EnergyControl	13 Replies 181 Views	May 01, 2014, 09:22:21 pm by pulverkaeufer
	Ask a Drug Expert Physician about Drugs & Health new Started by DoctorX « 1 2 All »	26 Replies 445 Views	May 01, 2014, 07:18:28 pm by dandanthecreamman
	The Hub's Harm Reduction & Drug Awareness Thread Started by Gregory House	16 Replies 559 Views	March 01, 2014, 11:48:27 pm by GrandWizardsLair
	Why 420 isn't safe - the dangers of cannabis new Started by 2fruits « 1 2 3 All »	40 Replies 462 Views	May 01, 2014, 09:55:57 am by Cornelius23
	First time heavy drug new Started by authorita	5 Replies 74 Views	April 30, 2014, 10:44:05 pm by pops26
	MOVED: The DMT Club... Break On Through To the Other Side new Started by Jack Harkness	0 Replies 2 Views	April 29, 2014, 09:38:34 pm by Jack Harkness
	Opium Den new Started by Pax	1 Replies 15 Views	April 29, 2014, 03:30:35 pm by Jesus.Saves
	Synthetic Cannabinoids, which ones??? new Started by RC4EveryOne	5 Replies 85 Views	April 29, 2014, 12:49:03 pm by TRC
	How to CLEAN my SPEED / MDMA to know its purity ? new Started by MasterChief	6 Replies 58 Views	April 17, 2014, 05:35:46 pm by GODofWAR
	Inject IV xanax alprazolam blotters new Started by op8ed	1 Replies 11 Views	April 17, 2014, 11:44:45 am by owockEznan
	Ibogaine therapy for addiction - my manual new Started by 2fruits	3 Replies 66 Views	April 06, 2014, 02:30:47 am by Soda
	what is the difference between no 3 heroin and no 4 in terms of effect? new Started by thelaststraw	6 Replies 195 Views	April 05, 2014, 01:05:50 pm by cryngie
	***!!! HOW TO QUIT OPIOIDS WITHOUT WITHDRAWAL SYMPTOMS new Started by Tryptamine	13 Replies 281 Views	April 04, 2014, 10:18:20 pm by Rounded
	The most efficient/easiest way I have found to smoke DMT new Started by TheKushLife	4 Replies 116 Views	April 04, 2014, 10:09:52 pm by Rounded
	Steroids harm reduction new Started by flaxceed	8 Replies 141 Views	April 01, 2014, 03:06:58 pm by flaxceed
	MDMA PURITY TEST new Started by lila1999	2 Replies 88 Views	April 01, 2014, 07:38:49 am by DoctorX
	MDMA new Started by mr420	8 Replies 200 Views	March 28, 2014, 01:07:59 pm by Rounded



GLOBAL DRUG SURVEY

Global Drug Survey

- GDS is an independent drug use data mapping agency that conducts annual, online, anonymous, surveys.

Limitation: findings are not representative of drug using population

- Questions about access, purchase from Silk Road, & motivations for use/non-use.
- The base sample (n=9470) reported recent drug purchase and resided in the United Kingdom (n=4315, median age 24, 76% male), Australia (n=2761, median age 32, 76% male) or the United States (n=2394, median age 21, 80% male).

Drugs purchased on SR

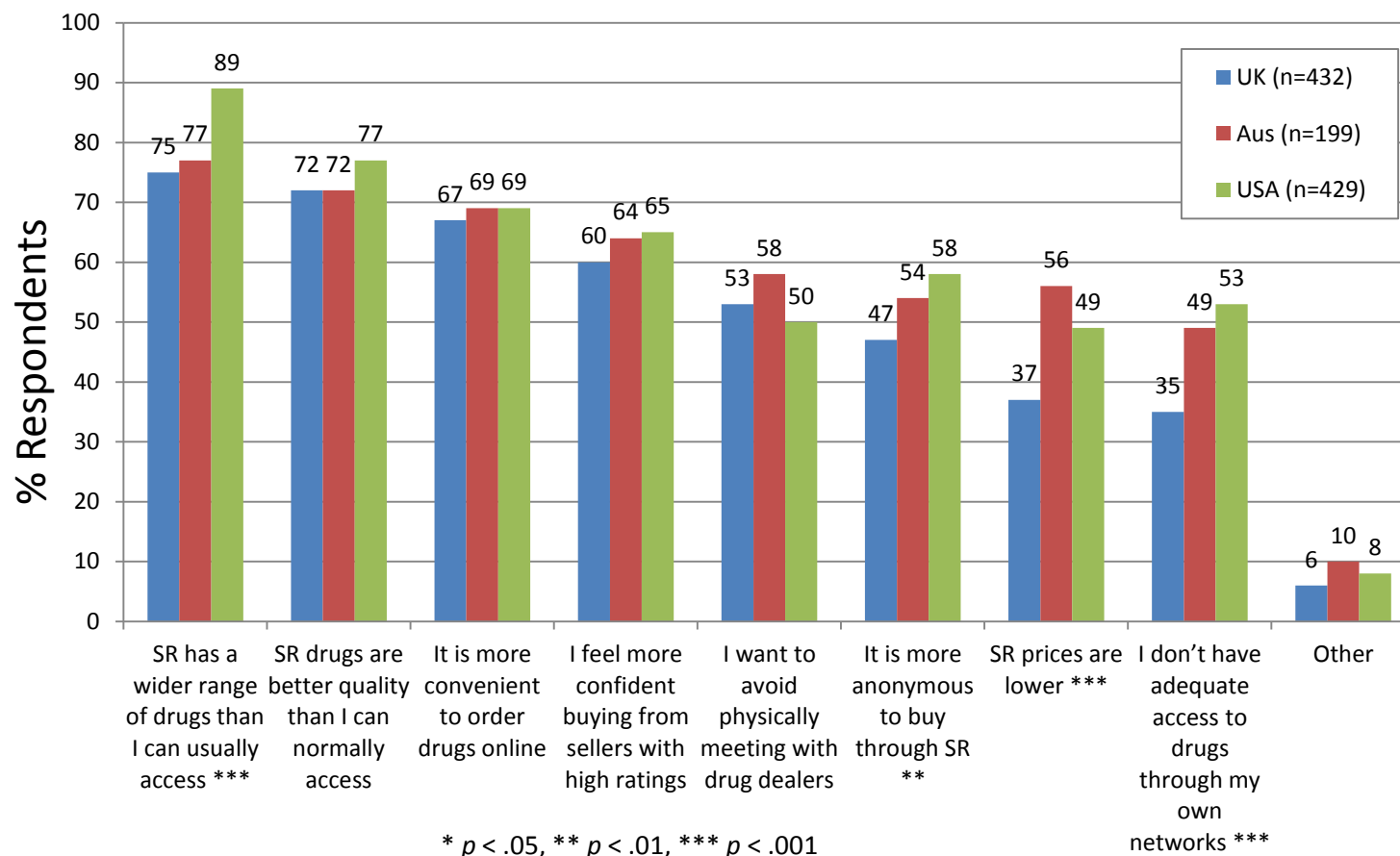
From Global Drug Survey 2012 see Barratt, Ferris & Winstock (2014)

Rank	UK (n=422)		Australia (n=193)		USA (n=421)	
	Drug	%	Drug	%	Drug	%
1	MDMA (All)	56	MDMA (All)	60	MDMA (All)	53
2	Cannabis (All)	51	MDMA powder	47	MDMA powder	45
3	MDMA powder	43	Cannabis (All)	34	LSD	45
4	Cannabis Skunk	39	LSD	33	Cannabis (All)	34
5	LSD	29	MDMA pills	27	NBOMe (All)	29
6	Cannabis Resin	29	Cocaine	25	2C (All)	27
7	MDMA pills	29	Cannabis Skunk	24	Magic Mushrooms	27
8	2C (All)	23	2C (All)	16	Cannabis Skunk	24
9	2C-B	22	Amphetamine (All)	16	DMT	24
10	Cannabis Grass	21	NBOMe (All)	15	25I-NBOMe	22
11	Prescription drugs (All)	18	Prescription drugs (All)	15	MDMA pills	21
12	Ketamine	17	DMT	15	Prescription drugs (All)	20
13	NBOMe (All)	13	Cannabis Grass	14	2C-B	18
14	DMT	11	2C-B	13	Cannabis Resin	17
15	25I-NBOMe	11	Magic Mushrooms	13	25C-NBOMe	16
16	Benzodiazepines	10	Amphetamine	13	Ketamine	15
17	Magic Mushrooms	9	25I-NBOMe	12	Benzodiazepines	12
18	Cocaine	9	Ketamine	9	Methoxetamine	11
19	Amphetamine (All)	9	25C-NBOMe	9	2C-E	11
20	Amphetamine	9	Benzodiazepines	9	Cannabis Grass	10

Note. Base sample = Respondents who usually buy their own drugs (including 'legal highs') and report having consumed drugs that were purchased through Silk Road

Reasons for accessing drugs on Silk Road

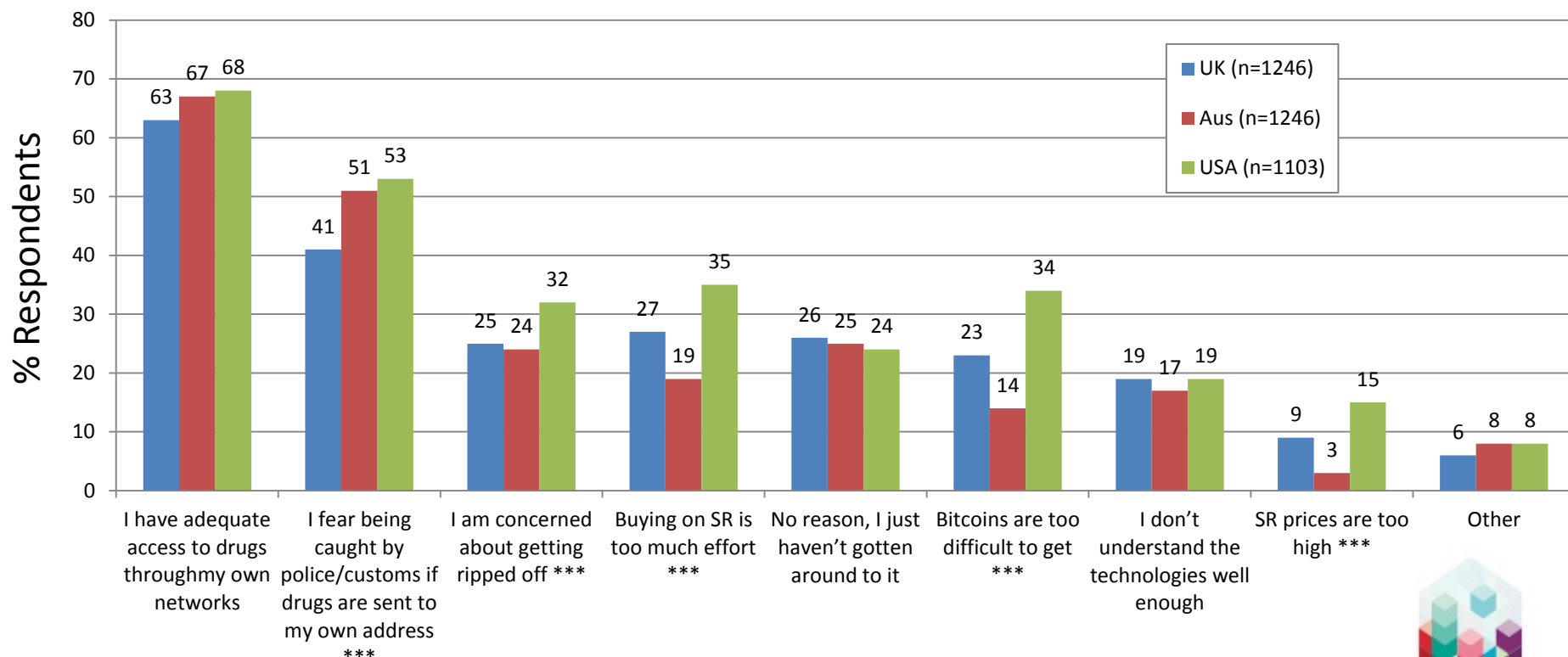
From Global Drug Survey 2012 see Barratt, Ferris & Winstock (2014)



GLOBAL DRUG SURVEY

Reasons for NOT accessing drugs on SR

From Global Drug Survey 2012 see Barratt, Ferris & Winstock (2014)



* $p < .05$, ** $p < .01$, *** $p < .001$



GLOBAL DRUG SURVEY

The NDRI Silk Road study

(Barratt, Lenton & Maddox, ongoing)

- Aims to understand Silk Road use from a buyer's perspective.
- People who purchased drugs from Silk Road 1.0 are invited to complete anonymous, encrypted, online instant messaging interviews.
- The (n=20) interviews take a life history approach to ascertain drug use trajectories and drug purchasing trajectories, exploring the contexts of online drug purchasing and drug use.
- We are also interested in how drug use and harms are affected by increased access and the availability of a wider range of substances through Silk Road.
- We also discuss their tech context: computer skills, Internet use and experiences of Tor, encryption and Bitcoin.
- Will present some interim results here today

The NDRI Silk Road study

(Barratt, Lenton & Maddox, ongoing)

- Wider range of drugs than I can access offline

4:46:32 pm [interviewer]: After reading the gawker article, what was it that motivated you to access SR? ie, what in particular where you going there for?

4:47:31 pm [P21]: initially, it was disbelief, "there's no way that this can be real," sort of thing

4:48:05 pm [P21]: and then i compared the amount and variety of drugs available on there along with the prices to drugs locally

4:48:40 pm [P21]: it just made more sense to order from SR instead of buying locally

- SR drugs are better quality or cheaper than I could access offline

9:13:59 am [P15]: "...I only started really buying consistently out of necessity. I live in an area where the quality of marijuana is not up to par to someone with a tolerance like me. It was very difficult to get medical-grade weed, such that would come from a dispensary. When it was available, it was expensive and there were no price breaks. It just became impractical..."

The NDRI Silk Road study

(Barratt, Lenton & Maddox, ongoing)

- More convenient than purchasing drugs offline

10:24:09 am [P11]: I didn't move online. I was always online, I've never purchased drugs in person. I don't like the idea of it.

10:25:09 am [Interviewer]: what appeals to you about being able to buy cannabis online ...

10:25:48 am [P11]: ...It's so easy to order cannabis online. You pay someone, an anonymous person, anonymously, and the drugs arrive a day later.

10:26:09 am [P11]: No worries, and almost no risk when purchasing domestically.

- Confidence in buying from sellers with high ratings

7:52:08 am [Interviewer]: what made you trust the environment enough to purchase? (or was this not an issue?)

7:55:01 am [P15]: Well, I'm the kind of person that obsessively researches any chemical I'm taking so I know exactly what the risks are, what the dosage should be like, and just safety in general. SR was able to facilitate that because I could pour through a vendor's reviews, as well as read through their forum review thread.

The rating system and feedback were enough to quell any misgivings. It wasn't like I was unfamiliar with how the mail system works in relation to chemicals being sent to me

The NDRI Silk Road study

(Barratt, Lenton & Maddox, ongoing)

- I want to avoid physically meeting with drug dealers in person

1:04:16 pm [P22]: I preferred the experience of buying online really. I could shop around get the product I wanted and it felt much safer.

1:05:01 pm [P22]: Than going to some dodgy car park in the middle of the night to meet some bloke to buy whatever it was he had to sell.

- It's more anonymous to buy drugs through SR

11:16:55 am [P11]: The simplicity of it all. A quick online search, a simple step-by-step guide to follow, and not much later you have illegal substances in your mailbox. And no one knows I did it! (Except the vendor...)

The NDRI Silk Road study

(Barratt, Lenton & Maddox, ongoing)

- Avoid having drugs 'pushed' to you

Quote 1

10:31:10 am [P11]: Also regarding purchasing drugs online; I don't like the fact that the [offline] dealer could potentially try to make me buy more (or other) drugs than I want. He can advertise on Silk Road all he wants, but I can choose to ignore it there. I feel that if I meet him in person, he'll be able to... well, act differently. (Could be a she!)

Quote 2

9:00:45 am [P15]: Yes, I've bought locally. It's pretty universal for dealers to oversell their product. The very few that don't are the successful and more business-oriented ones.

The reason there was no pushing on SR was simple- the rating system let the product speak for itself. It's very common for a vendor to get very very high quality product. Once a few orders go out and the great feedback starts building up, vendors can get so many orders that they get swamped and have to temporarily take down their listings while catching up

9:01:58 am [P15]: I saw it happen a lot when the general quality of a particular drug across the entire site is lacking. A vendor will get some great product, word gets out, and everyone flocks to them

Conclusions

- Although NPS are not the most frequently accessed drugs, there are between country differences which probably reflect local drug market factors.
- motivations for buying drugs online are varied and include
 - Variety of drugs available
 - Quality
 - Convenience
 - Price
 - Confidence provided by online seller rating schemes
- The dynamic nature of the online drug market places, including the impact of drug law enforcement actions and responses to these, means this aspect of the NPS story is one that is rapidly changing.

Conclusions cont.

- Clamping down on surface web drug discussion may send people to dark web
 - Harder to monitor
 - More of a supply/access focus
 - Further marginalisation/distance
- Drug market effects
 - New products rapidly find way into the market
 - Mail delivery of small amounts – clusters of harm
 - Labelling not valid, content & purity unknown
 - Secondary supply – especially for young, inexperienced users

