

Buying drugs on the dark net: relevance of cryptomarkets, characteristics of purchasers and ~~opportunities~~ challenges for survey research

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background

- » Surface web/deep web/dark net/**cryptomarkets**
- » **2/3** of purchases on cryptomarkets are drug related, dynamic and growing market (EMCDDA 2017)
- » Increased interest from **law enforcement**, but may include some aspects of **harm reduction** (reputation, feedback, exchange with other users)

Drugs and drug-related chemicals



Source: Web-IQ (2017).

background

- » Cryptomarkets located in the so-called darknet offer a convenient and comparable safe way to buy drugs in addition to traditional supply sources like street dealers or social supply
- » drugs bought on the darknet are more likely to be **intended for redistribution** on local markets (EMCDDA 2017)
- » little is known about the characteristics of people who buy drugs from different supply sources
 - » buyers of cryptomarkets are more likely to be **younger, male** and associated to a **clubbing scene** (Winstock et al., 2017)
 - » participants who bought drugs from the darknet used a **higher range of drugs** than other drug users (Buskirk et al., 2015)
 - » often associated by consumers with a **wider range of substances, lower prices** and **higher quality** (Bancroft and Reid 2015, Barratt et al. 2013, Barratt et al. 2015)

aims and methods

Quantitative analyses

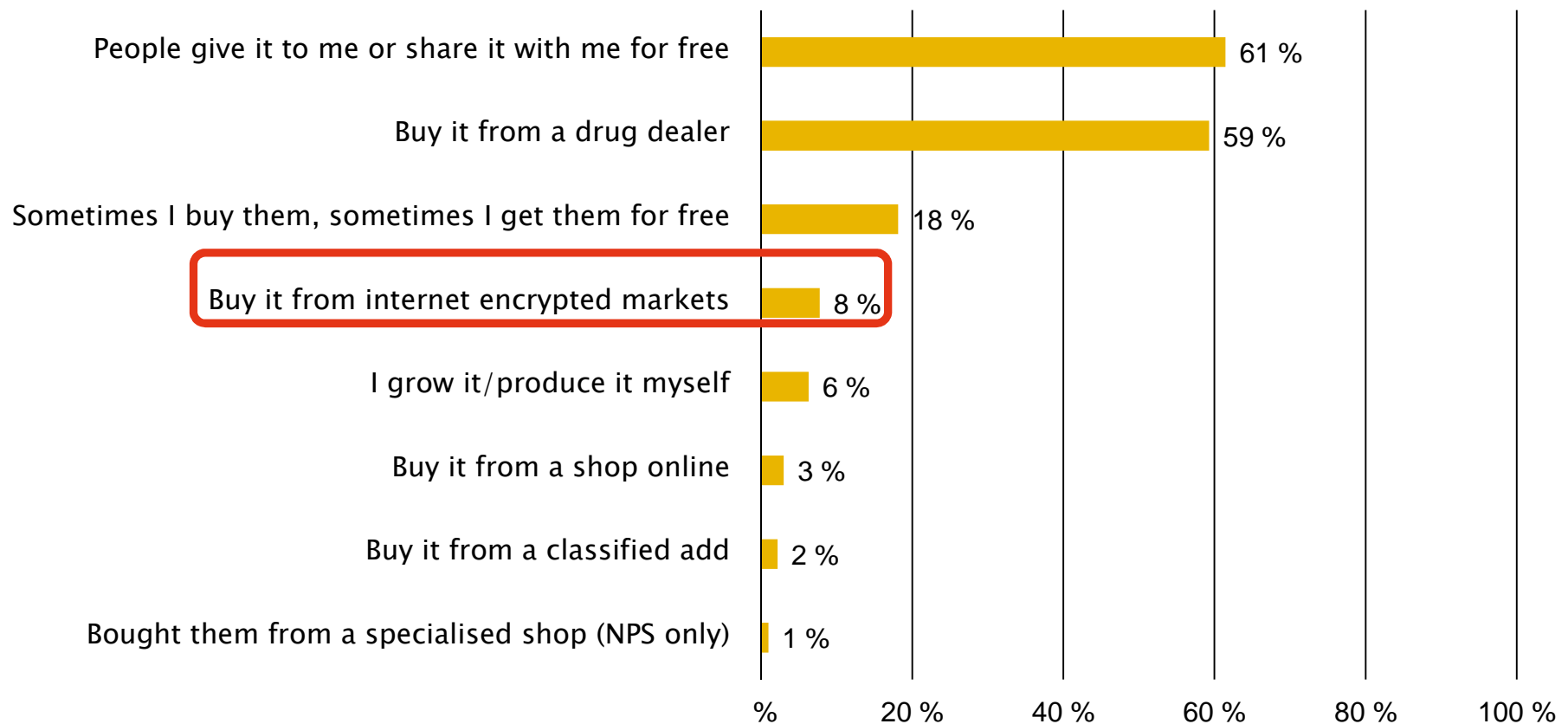
- » Data from the European Web Survey on Drugs (EWSD) are analyzed to assess ...
 - » ... the **relevance of cryptomarkets** for different substances and across countries
 - » ... **characteristics of users**, who usually buy drugs on cryptomarkets and users, who predominantly get drugs from other sources (e.g. dealer, friends)
- » EWSD data was used from **all participating countries** (Austria, Belgium, Estonia, Finland, Italia, Latvia, Lithuania, Poland, Cyprus and Luxemburg) with a total number of **20.157** respondents (valid answers)

Lessons learned from pilot testing a new recruitment strategy

- » Challenges and opportunities of sampling respondents in the dark web are discussed in reference to a **new sampling strategy** tested in Austria
- » web survey was placed in **the darknet** on an .onion-page and advertised on darknet-pages, mostly forums and markets
- » Qualitative information was gathered through **communication with forum hosts**.

The relevance of cryptomarkets for different substances and across countries

Figure 1: Usual sources of supply for all respondents across all substances
(multi-response options, valid answers = 20.157)



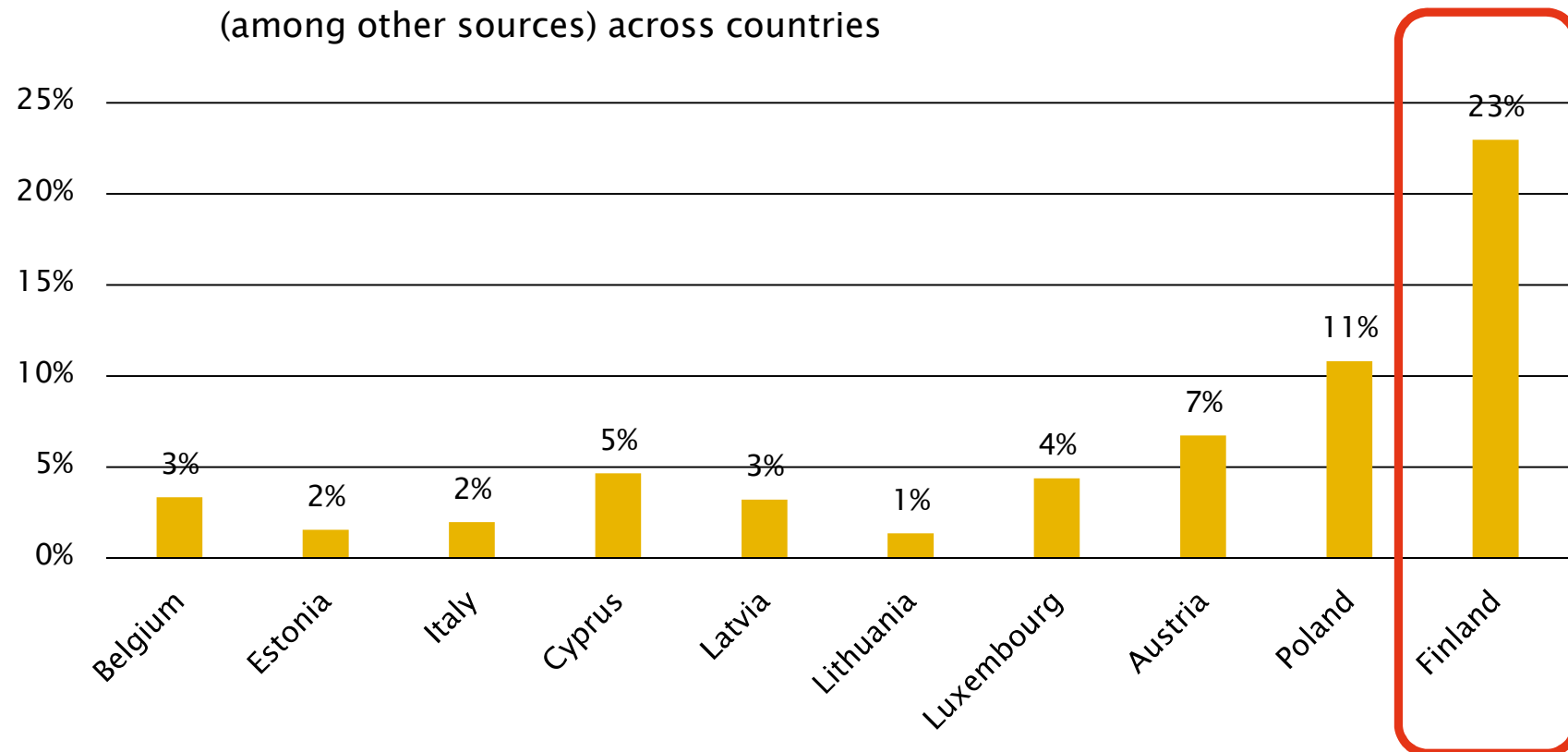
The relevance of cryptomarkets for different substances and across countries

TABLE 1: percentage of purchasers using cryptomarkets by substance

	Usually buy on cryptomarkets (valid percent)	Total number of respondents providing valid answers
Cannabis resin	4.8	5.347
Herbal Cannabis	4.1	16.928
Amphetamine	6.9	4.189
MDMA	8.3	6.229
NPS (herbal)	13.5	379
NPS (powder)	27.2	1.131
NPS (liquid)	9.6	104
NPS (blotters)	12.1	232
Methamphetamine	9.3	942
Cocaine	3.3	4.418

The relevance of cryptomarkets for different substances and across countries

Figure 1: percentage of people usually buying on cryptomarkets (among other sources) across countries



Characteristics of purchasers on cryptomarkets

- » People using cryptomarkets (among other sources) **more likely to be male**.
- » People using cryptomarkets (among other sources) report a **higher number of drugs**.
- » By contrast **age differences** are very small, no consistent trend across countries.
- » People using cryptomarkets (among other sources) are NOT more likely to live in **rural areas**.
- » Averages **amount** per purchase and average **price** per gram does not show substantial differences

	People usually buying on cryptomarkets (among other sources)	People usually not buying on cryptomarkets
gender ratio (male : female)	74 : 24	64 : 36
mean age	24.6	25.5
mean number of substances (LT)	7.8	5.5
place of living (city/town : village)	86 : 14	81 : 19

Pilot test: recruitment via darknet

- » Technical requirements
 - » installation of a web server that is accessible through the **TOR** (“The Onion Router”) network and the setup of the survey on a Hidden Service
 - » usages of **encryption software** to communicate with the darknet community and make contact with cryptomarkets, vendorshops or forums (PGP, “pretty good privacy”)
- » Lessons learned
 - » Darknet pages are subject to **frequent changes** with regard to .onion-url and accessibility
 - » Connection via TOR-Browser is **often slower** than with conventional browsers (implications for length of the survey or media files)
 - » Recruiting hardly works without the **permission of the administrator** and takes a lot of time.

Pilot test: recruitment via darknet

- » **trust and credibility** (e.g. provided by a well known organization or recommendations) are even more crucial than recruiting people on the clearnet
 - » *“...in general the darknet community are less open to participating in studies than mainstream clearnet communities such as Reddit, Bluelight etc, for sure.”*
 - » *“I would also like to see some type of confirmation that this is by Checkit, for example if you have an email address @checkit.wien or a colleague does, so they can just send me a email so I know it is a study by you guys.”*
 - » *“Being recommended by owner of larger marketplaces for example and proving that users are not talking to the police”.*

Pilot test: recruitment via darknet

- » Very low response rate
 - » 990 clicks on the first information page were registered, 53 users started the survey and **only 25 completed it**
- » restriction to **German** language
 - » English version might allow for a bigger sample, but requires a more complex survey instrument due to **country specific questions** (e.g. different currencies, sociodemographic differences)

Conclusions

- » According to EWSD purchasers on cryptomarkets are still a **rather small subgroup** of all drug purchasers. Most people who use cryptomarkets also use other sources of supply. **9 out of 10** respondents never bought drugs on cryptomarkets.
- » Purchasers on cryptomarkets are more likely to be **male** and **consume a wider range of substances**. By contrast there are no substantial differences in terms of age, place of residence, price and average amount.
- » The relevance of cryptomarkets varies across substances **(NPS!)** and countries **(Finland!)**

Conclusions




Conclusions

- » Recruitment of respondents from the darknet calls for **specific techniques and procedures**. Specific attention should be paid to build trust and guarantee credibility and anonymity, since awareness of privacy issues is higher among users of the darknet than among users of the surfaceweb.
- » Is the group of darknet purchasers **truly small** or can those people not be reached with conventional web surveys?


Conclusions

**Sehr geehrter Besucher,
Ihre Meinung ist uns wichtig!
Sind Sie mit dem Reinigungservice
in dieser Toilettenanlage zufrieden?**

*Dear visitor,
we care about your opinion!
Are you satisfied with the cleaning
service of this washroom?*



Letzte Reinigung / Last cleaning 17:49



thank you your attention!

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