Gendered Sources of Drug Supply in the European Web Survey on Drugs

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INTRODUCTION

Theories regarding normalization of drug use have increased attention to social drug supplies and the meaning of dealing. Yet, as frequency of drug use increases, people who use drugs increasingly utilize drug dealers. Further, females more often report receiving drugs for free.

We examine whether gender differences in sources is moderated by increased frequency of use using cross-national data from the European Web Survey on Drugs.

Sources of drug supply

Sharing drugs is common and normative, especially during social use with members of the peer group.[1-3] Some argue that this trend has normalized a ***social supply*** of drugs resembling gift-giving and redefining dealing.[4-8] Yet, using a dealer remains a drug source, especially for those who use drugs more frequently.[9-10] Further, cryptomarkets have arisen as an alternative to dealers, which may be viewed as less risky.[11] For cannabis specifically, market costs may influence decisions to grow one's own supply.[12]

Gender and drug supply

Gender also plays a role in drug acquisition. The dynamics by which males and females obtain substances may be different. There is evidence that females receive drugs as a gift or for free more often than males.[13-15] Females in particular describe easy access to free use of recreational cannabis, with male friends often the purchaser and with whom they use it.[1] However, drug use can become normative and central to all-female peer networks as well.[16]

Thus, given the greater willingness to go to a dealer as frequency of use increases, frequent use may close any observed gender gap in sources.

AIM

In this analysis, we examine the gender dynamics of drug supply sources across several drug types in the European Web Survey on Drugs (EWSD).

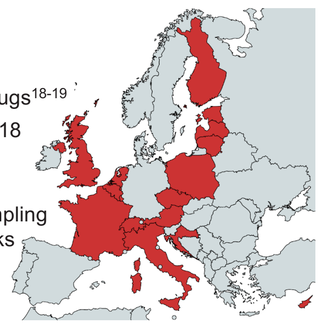
Importantly, by using this unique dataset, we extend this line of inquiry to a large sample of people who use drugs at varying frequencies across 16 countries. In examining cocaine and MDMA in addition to two forms of cannabis, we heed calls to move beyond herbal cannabis in examinations of social supply, as well as calls to consider international contexts.[17]

Although there may be differences across substances, we hypothesize that generally females will report higher rates of receiving a drug through sharing or for free than males, while males will be more likely to report buying from a dealer. However, we anticipate that the gender gap may be moderated by frequency of use, given increasing reliance on dealers among those who use drugs habitually.

METHODS

Data

European Web Survey on Drugs[18-19]



- 16 countries from 2016-2018
- Conducted by national partners of the EMCDDA, each devising its own sampling strategy based on networks and experiences to cover a range of different user groups
- Established reliability and validity[18-19]
- We examine respondents who used 4 substances: herbal cannabis (N=23,973), cannabis resin (N=9,180), cocaine (N=6,877), and MDMA (N=9,809)
- Limitations have been described in other papers.[18-19] For example, web survey results are not generalizable to the general population, but are useful for comparing characteristics of those who use drugs.[20]

Variables

- *Outcome variables for acquisition*: (1) obtained from a dealer; (2) obtained through sharing or for free; for cannabis, we also examine: (3) growing; (4) online
- *Frequency of use*[18]
  - Cannabis: infrequent (<11 days in past year), occasional (11-50), regular (51-250), and intensive (>250)
  - Cocaine and MDMA: infrequent (<11 days in past year), occasional (11-50) and frequent (>50)
- *Gender*: Female, Male
- *Controls*: household composition, education, work status, locality size, age, income, country

Models

Logistic regression for each source and substance

- Chained multiple imputation for missing control variables
- Country cluster-corrected standard errors
- All models include an interaction between frequency of use and gender
- Given this interaction, all results are displayed graphically because odds ratios are not particularly revealing in the presence of an interaction. This approach also allows us to focus on the marginal effects, which are preferred in the case of interactions in logistic regression.

RESULTS

Table 1 displays descriptive statistics. Across all substances, females are more likely to receive drugs for free, while males are more likely to use a dealer. For cannabis, males were more likely to grow their own or purchase online, although in general these responses were rarer.

Figures 1 through 4 display the relationship between drug supply sources, gender, and frequency of use from logistic regression models. Across each substance, we find that among those who use the substance less frequently, females are more likely to receive the substance for free, while males are more likely to use a dealer. While there is a gender gap in use of a dealer when use is less frequent whereby females have lower probabilities than males, this gender gap closes as the frequency of use increases. In other words, females are equally likely as males to use dealers to acquire illicit drugs when using at more frequent levels. By comparison, although decreasing with frequency of use for both genders, the probability of acquiring drugs for free or through sharing is higher for females. This tends to be the case until frequency of use reaches its highest level, where the difference became non-significant with the exception of herbal cannabis. The gender gap also narrows for online purchases of herbal cannabis, although it widens for growing one's own supply.

Table 1: Percentages of Sources and Frequency of Use by Drug Category, Total and by Gender

	Herbal Cannabis			Cannabis Resin			Cocaine			MDMA		
	All	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female
	100.0%	64.5%	35.6%	100.0%	70.3%	29.7%	100.0%	65.6%	34.5%	100.0%	62.6%	37.4%
Sources												
Share/free	54.4%	48.4%	65.2%	53.3%	48.3%	65.2%	70.8%	65.6%	80.7%	62.0%	56.7%	70.9%
Dealer	58.7%	63.1%	50.8%	60.4%	64.9%	49.9%	57.2%	62.8%	46.5%	74.0%	75.9%	70.9%
Grow	7.5%	9.3%	4.3%									
Online	5.1%	6.5%	2.5%									
Use												
Infrequent	27.5%	22.8%	35.9%	42.3%	39.9%	48.0%	72.7%	72.5%	73.2%	75.4%	76.3%	73.9%
Occasional	20.2%	19.8%	21.0%	24.4%	25.0%	23.1%	19.4%	19.5%	19.4%	20.2%	19.8%	20.9%
Regular/Frequent	27.4%	29.8%	23.0%	18.2%	19.2%	15.7%	7.9%	8.1%	7.4%	4.4%	4.0%	5.2%
Intensive	24.9%	27.6%	20.1%	15.1%	15.9%	13.3%						

Figure 1: Predicted Probabilities of Herbal Cannabis Acquisition Sources by Gender and Frequency of Use

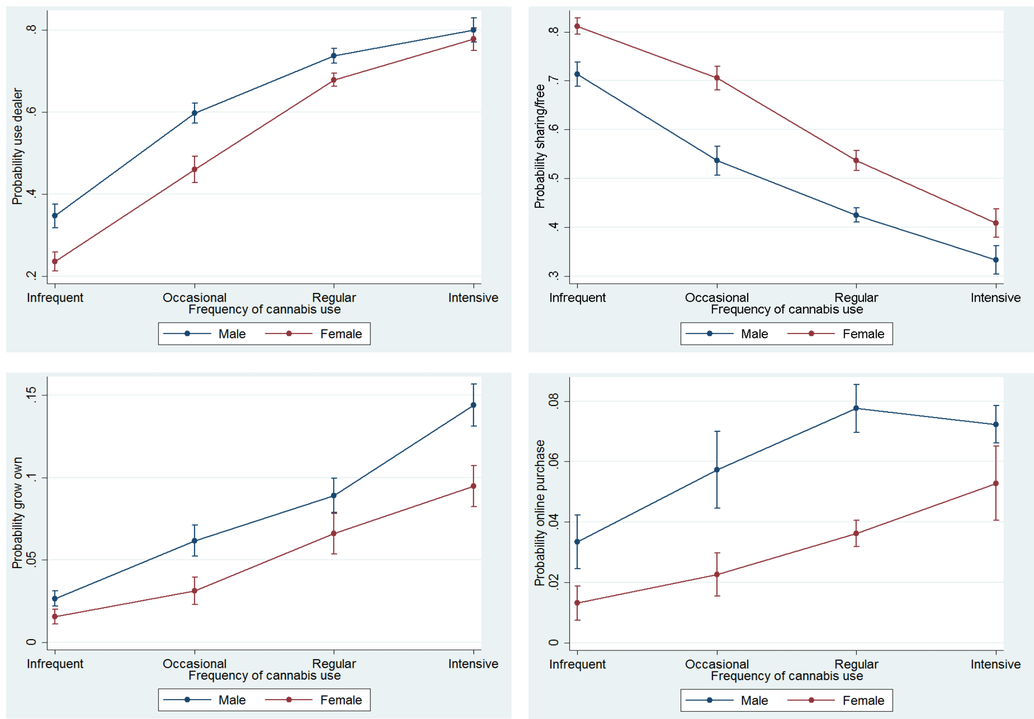


Figure 2: Predicted Probabilities of Cannabis Resin Acquisition Sources by Gender and Frequency of Use

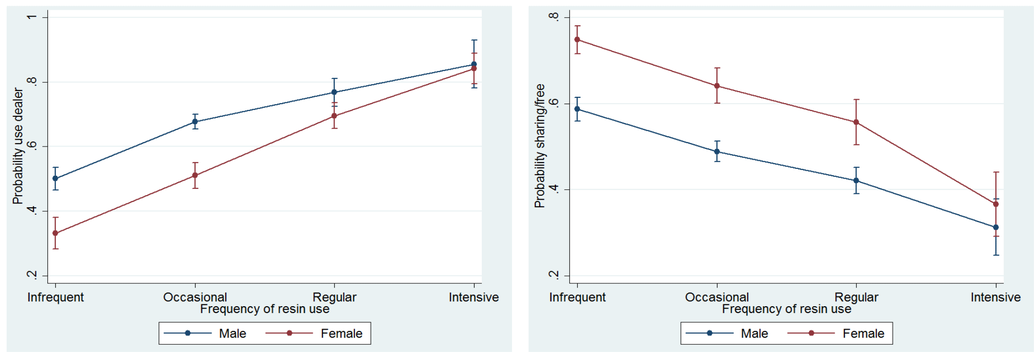


Figure 3: Predicted Probabilities of Cocaine Acquisition Sources by Gender and Frequency of Use

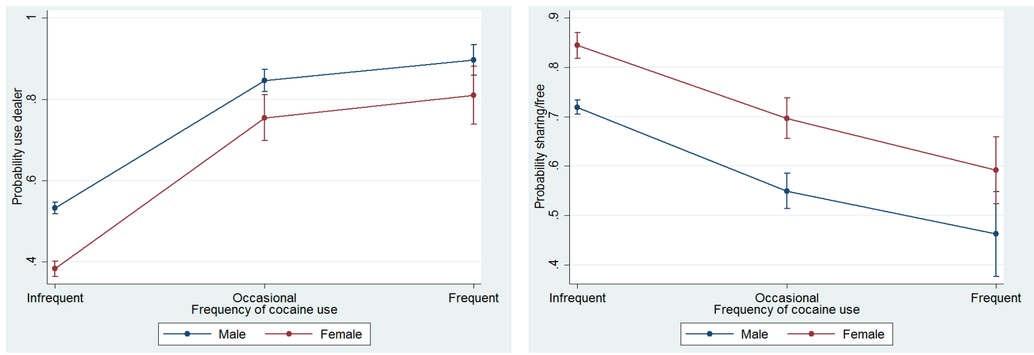
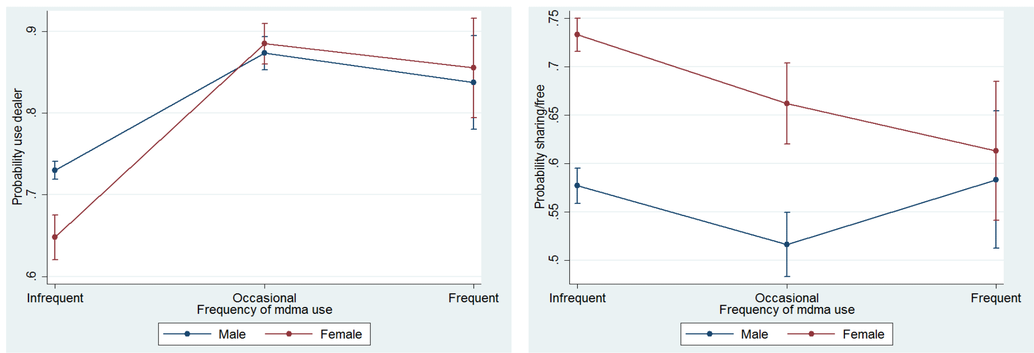


Figure 4: Predicted Probabilities of MDMA Acquisition Sources by Gender and Frequency of Use



CONCLUSIONS

Prior research shows females are more often the beneficiaries of free or shared substances relative to males. Also, use of a dealer may increase with frequency of use. Our research shows that there is a dependence between these two phenomena, with a largely consistent pattern across four different substances using data from 16 European countries.

Rethinking social supply as gendered

Our research demonstrates that there is a gendered dimension to social supply across four substances, conditioned upon frequency of use, that should not be ignored. Except among those with the highest frequency of use, females are typically more likely than males to acquire drugs through social sources. This literature has stressed that criminal justice approaches to disrupting distribution overlook social supply. Our results show that this is especially the case for females who consume at lower frequencies, given that they are the beneficiaries of sharing more so than males. Thus, efforts at supply disruption focusing on dealing will more likely affect the purchasing habits of males generally and females who use habitually, while neglecting the social sources that are more common for females relative to males. We do not intend to imply that social supply should become an increasing focus for criminal justice; rather, our results demonstrate the disparate impact of a dealer-focused approach.

Conceptualizing a hybrid market

At the same time, however, using a dealer was very common among our respondents, suggesting that the increasing emphasis on social supply should not neglect this source. Using a dealer was especially common for those who used occasionally or more, but was even common among individuals who infrequently use cocaine and especially MDMA. And among those who use infrequently, males had higher rates of using a dealer. Despite social supply, a sizable proportion of respondents nonetheless considered some transactions as with a "drug dealer," regardless of whether social in nature. Thus, we echo calls to move towards considering supply as more akin to a ***"hybrid" market*** using a combination of sources.[21]

Any consideration of how to disrupt supply must incorporate and center discussions of gender, while also considering the hybrid nature of drug markets.

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ACKNOWLEDGEMENTS

Dr. Vuolo's role in this manuscript was made possible through a Fulbright-Schuman Scholarship administered by the U.S. Department of State and the Fulbright Commission of Belgium-Luxembourg. The authors would like to thank the European Web Survey on Drugs group, as well as Eleni Kalamara for her invaluable assistance with the dataset. They would also like to thank all the participants of the survey in the different countries, who spent their time and shared their knowledge. The authors have no conflicts of interest to report.

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