drugs and me

Full report: Recreational drug use during COVID-19 outbreak

By

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with the help of

the Drugs and Me team and our community

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Introduction

The 2020 coronavirus (COVID-19) pandemic has caused significant changes to people's lives worldwide. Governments have imposed social restrictions, such as lockdowns and curfews, in an effort to control the spread of the virus. These restrictions have had a severe impact on the economy and people's use of technology.

The health and economic crises resulting from the pandemic have caused stress and despair in millions of people around the world[1]. Uncertainty and loneliness have led to a decline in people's wellbeing and mental health[2].

Humans have multiple mechanisms to cope with stress. In this arsenal of coping strategies, we can find the use of psychoactive drugs. In medical settings, depressants such as benzodiazepines are prescribed to ameliorate anxiety. Recently, psychedelics such as LSD and psilocybin have shown to attenuate depression and anxiety symptoms[3] too.

In non-medical settings, psychoactive drugs are also consumed recreationally. A small percentage of the people who use drugs recreationally end up developing drug-related disorders, such as substance dependence or addiction. Stress increases the likelihood of developing these disorders. It might seem counterintuitive, but psychoactive drugs are used under stress conditions as a coping mechanism[4]. Thus, stress-related mental health conditions, such as anxiety and mood disorders, and addiction and dependence, are often co-expressed in the same individual[5].

Given people's tendency to use drugs as a coping mechanism for stress and anxiety, the impact of the pandemic could have potentially changed drug use. In fact, a number of organisations have conducted surveys and already described changes in recreational drug use patterns. We reported some preliminary findings of our COVID-19 drug use survey in June.

In the survey conducted by Global Drug Survey (GDS) between May and June, 43% of respondents reported an increase in their frequency of drinking alcohol, and 36% claimed an increase in the amount of drinking[6]. Other reports also showed an increase in recreational drug use. Crew 2000, a charity based in Scotland, conducted two online surveys in March and April, in which 57% and 52% of respondents reported a more frequent drug use, whereas only 19% and 13% claimed a less frequent use[7-8].

The GDS report also described an increase of THC-containing cannabis use in 39% of their participants, an increase of prescription benzodiazepines use in 37% of participants, and an increase of psilocybin use in 23% of participants. On the other hand, 41% of participants reported less frequent MDMA use, 38% indicated less cocaine use, and 35% decreased their amphetamine use[6].

Social restrictions have also impacted international travel and postal services. Consequently, the supply chains in drug markets may have also been disrupted worldwide. In the survey conducted by Crew 2000, 62% of respondents reported noticeable changes in the market[7]. Another survey carried out by the European Monitoring Centre for Drugs and Drug Addictions (EMCDDA) and Europol reported a slight local increase in prices of cannabis, heroin, and cocaine throughout the EU[9]. The reason was in some cases due to stockpiling, a phenomenon noted by other surveys. The GDS survey found that 16% of respondents

reported buying drugs in larger quantities than usual[6,9]. EMCDDA have also reported a decrease in quality of some drugs due to shortages[9].

Drugs and Me conducted a survey in response to the COVID-19 outbreak titled: 'Recreational drug use during COVID-19'. In this report, we provide a description of the dataset we obtained. Firstly, we report changes in the amount, frequency and type of substances consumed. Secondly, we describe our observations on self-medication, drug dependency and withdrawal symptoms. Finally, we show our insights on the support individuals get from organisations regarding their use of recreational drugs. The analysis of the data presented in this report is superficial. More detailed and targeted analysis of this dataset have been presented elsewhere or are currently in preparation.

Methods

Responses were collected during April 2020. The survey was hosted at Surveymonkey. Social media (Facebook, Instagram, Twitter and Linkedin) was used to recruit respondents. Respondents could enter a raffle upon completion of the survey. The prizes offered were a Reagent tests UK kit or a piece of psychedelic art by an amateur artist. Here, we do not describe the questions in the order they were shown to participants. All participants did not answer all questions as there were logic trees and dropouts.

The Appendix figures can be found here.

Results

Demographics

The survey was in English, but it was open to people worldwide. It reached over 2000 people. It was completed by participants living in 78 different countries. The country with most participants was the UK (35.4%). 21.6% of respondents were living in the US, 9.6% in Lithuania, and 4.5% in Spain. A full table listing the nationalities of the remaining respondents can be found in the appendix (Appendix Figure 1).

The survey had no age limit, participants ranged between under 18 and over 65 years of age. Around half of the respondents, 52.8%, were between the ages of 18-25, 16.1% were between the ages of 26-30, 9.4% between 31-35, and 7.9% were under 18 (Appendix Figure 2).

65% of participants were male, and 35% were female. In terms of gender, 64% of participants identified as male, 33% identified as female, while the remaining 3% identified as non-binary, other, or preferred not to say (Appendix Figure 3).

Most typically, participants were students (39.2%) or employed (38.8%). Additionally, unemployed (12.0%), self-employed (9.1%) and retired (0.9%) participants took part in the study.

A large proportion of participants, 73.9%, reported to live in a household of 2-4, 13.8% were living in a household bigger than 5, and 12.2% reported living alone (Appendix Figure 4). Participants sharing a household mostly did so with family members (49.2%), with a partner (19.3%), or with friends (12.3%). Others also reported to live with children, or in student residences (Appendix Figure 5).

Life changes due to the pandemic

We asked participants how their lives had changed due to the pandemic. More than half of the participants (60.4%) reported to be working from home, while 54.6% reported only leaving the house for shopping. 31.6% were self-isolating, 20.6% were working less hours, and 15.7% had lost their job. Only 5.9% of participants reported no change in their lives (Appendix Figure 6).

About half of participants (50.1%) experienced these life changes between 2-4 weeks before taking the survey, 35.5% of them 4 weeks before, while 11.2% reported facing changes 1-2 weeks before. Only 2% reported changes less than a week before completing the survey.

Trends and changes in alcohol consumption during the first month after the start of COVID-19 outbreak (referred to as just "outbreak" for the rest of this report)

Question 1: Do you currently drink alcohol?

1755 participants reported to be drinking alcohol at the time of response (Appendix Figure 7).

Question 2: Did you drink alcohol before the outbreak?

4.6% of participants drinking at the time of response reported to not drink before the outbreak (Appendix Figure 8).

Question 3: Why did you start drinking during the outbreak? (select all that apply)

We assumed participants who did not drink before the outbreak (4.6%) started drinking during this period. We asked this group about their motivations to start drinking. 16.0% of them reported to start drinking to have fun, 14.2% of participants started drinking to increase creativity, and 13.5% to relax or accompany a night off. 11.8% of participants reported to start drinking to cope with stress. A full list of answers is shown in *Figure 1*.

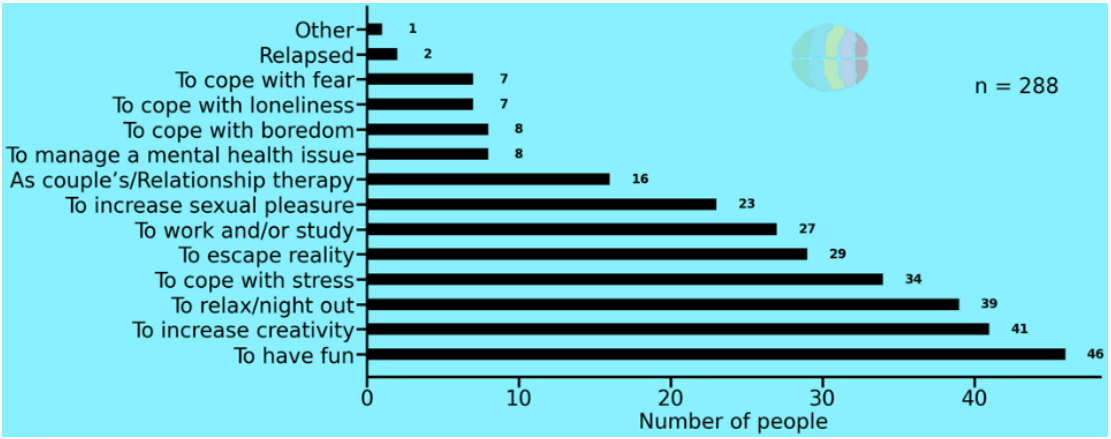

***Figure 1**. Participants' motivations to start drinking during the outbreak*

Question 4: On a drinking session during the outbreak, how much of each drink would you consume?

We asked participants the quantity of each type of alcoholic beverage they would drink during a drinking session during the outbreak. The most typical quantity (10.7%) reported was 2 glasses of wine (volume of 1 glass: 175 ml). Participants also reported to drink either 2 cans of beer (8.7%) (volume of 1 can: 330 ml), or 2 pints of beer (8.3%) (volume of 1 pint: 568 ml). 6.2% of participants claimed to drink 2 shots of spirits (volume of 1 spirit: 25 ml), and 5.6% of participants said they usually drank 2 cocktails on a typical drinking session (Appendix Figure 9).

Question 5: How many nights a week do you consume this amount during the outbreak?

When asked about how frequently they would consume the quantity answered in the previous question, 34.2% of participants reported to be drinking this quantity 2-3 times a week. 22.2% said they consumed this quantity once a week, while 21.3% reported drinking this quantity less than once a week (Appendix Figure 10).

Question 6: How has your alcohol consumption changed since the start of the outbreak?

Participants were asked to rate how their alcohol consumption changed since the start of the outbreak. Participants rated the change on a slider from 0 to 100, 0 being 'greatly decreased', 50 being 'hasn't changed', and 100 being 'greatly increased'. The answers were then grouped in intervals of 5. Most commonly, around 200 participants reported no change in their alcohol consumption. Around 90 participants stated that their alcohol consumption greatly decreased, and around 70 people stated that there was a great increase in their consumption. As shown in *Figure 2*, most participants who reported an increased consumption were concentrated mid-way between 'Hasn't changed' and 'Greatly increased'. On the other hand, the distribution of responses on the decreased consumption side was more even.

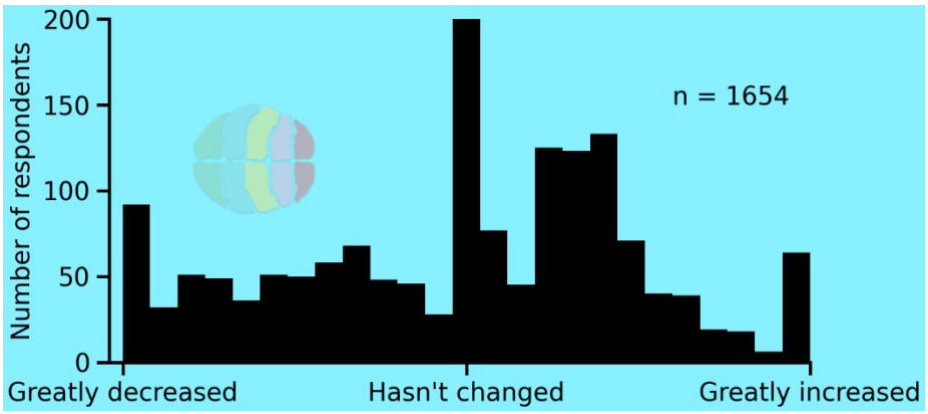

Figure 2. *Changes in participants' alcohol consumption since the outbreak*

Trends and changes in nicotine consumption during the outbreak

Question 7: Do you currently consume nicotine?

1123 participants reported to consume nicotine at the time of the survey (Appendix Figure 11).

Question 8: Do you smoke tobacco?

Out of the participants who reported to consume nicotine, 74.2% answered to consume this drug by smoking (Appendix Figure 12).

Question 9: How often do you smoke tobacco?

Out of the people who smoked tobacco, 67.6% reported to smoke habitually, 20.3% of them stated that they smoke socially, and 12% said to smoke on one-off occasions (Appendix Figure 13).

Question 10: On average, how many cigarettes/roll-ups do you smoke a day?

Participants smoking tobacco most commonly (47.0%) stated that they smoke between 1-4 cigarettes/roll-ups a day. 22.7% of them said to smoke 5-9 cigarettes, and 18.6% reported to smoke 10-14 cigarettes a day (Appendix Figure 14).

Question 11: Did you smoke tobacco before the outbreak?

4.1% of the participants who reported to smoke at the time of the outbreak were not smoking before this period (Appendix Figure 15).

Question 12: How has your tobacco consumption changed since the outbreak?

When asked about their change in smoking, participants again submitted their answers on a scale from 0 to 100. The answers were then grouped in intervals of 5. The most common answer (200 participants) was no change in frequency of smoking. At each of the two extremes, ‘Greatly decreased’ and ‘Greatly increased’, we found 45 participants. The distribution of responses was similar between the extremes and the centre, as shown in *Figure 3.*

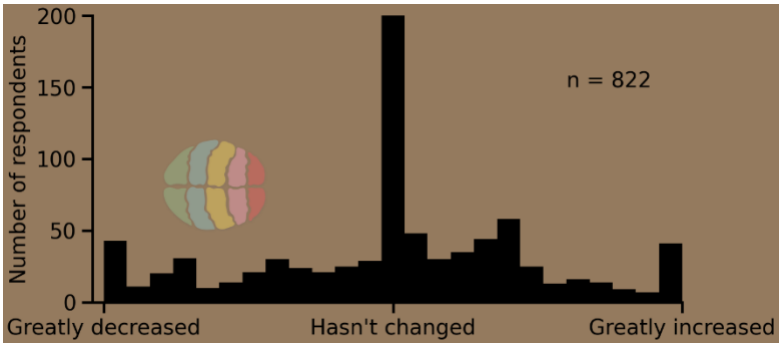

Figure 3. *Changes in participants' tobacco consumption since the outbreak*

Question 13: Why did you start smoking tobacco during the outbreak? (select all that apply)

We asked participants who started smoking during the outbreak to name their motivations to start smoking. Most commonly, as reported by 23.8% of participants, the reason to start smoking tobacco was 'to have fun'. 16.7% of participants started smoking 'to increase creativity', 13.1% of participants started 'to relax, or on a night out', while 10.7% of participants started smoking 'to cope with stress', as shown in *Figure 4.*

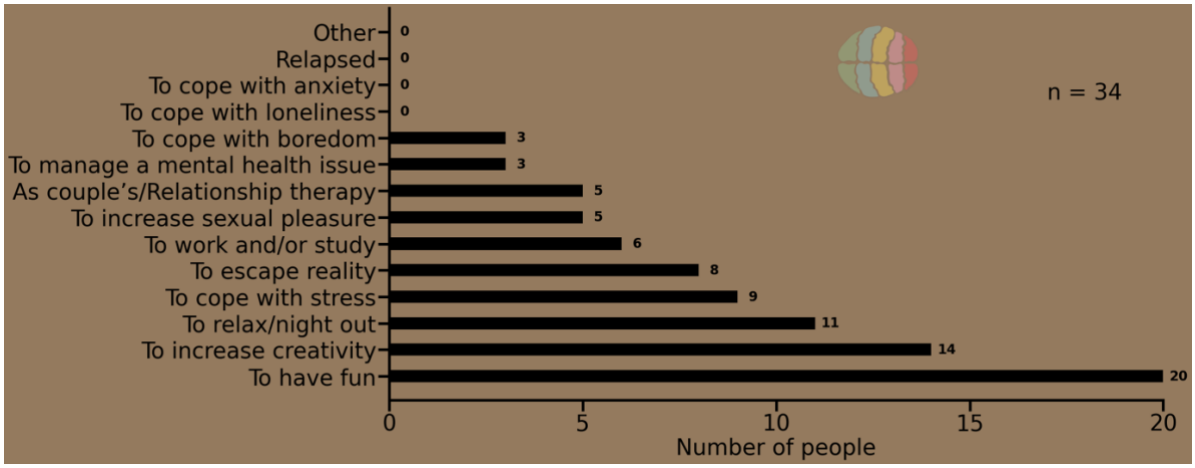

Figure 4. *Participants' motivations to start smoking tobacco during the outbreak*

Question 14: Do you vape nicotine?

Out of the participants who claimed to consume nicotine, 32.0% reported to vape nicotine (Appendix Figure 16).

Question 15: How often do you use a nicotine vape?

From the group of people who vaped nicotine, 77.5% of participants stated that they vape habitually, 12.7% of them said to vape on one-off occasions, while 9.8% stated that they vape socially (Appendix Figure 17).

Question 16: On average, how many times do you vape a day?

About half of participants who vaped nicotine (51.6%) stated that they vape more than 20 times a day. 18.4% vaped between 1-4 times, and 11.5% did so 5-9 times a day (Appendix Figure 18).

Question 17: Did you vape nicotine before the outbreak?

Most participants who vaped nicotine had also been vaping before the outbreak (91.9%) (Appendix Figure 19).

Question 18: How has your nicotine vape use changed since the outbreak?

Participants who vaped were asked about their change in vaping frequency since the start of the outbreak. The answers were again recorded on a scale from 0 to 100 and then grouped in intervals of 5. 90 participants reported that their vape frequency did not change. Only around 10 people stated that their use decreased greatly, while around 30 participants stated that their use had greatly increased. There was a higher concentration of responses on the increased use side than on the decreased use side, as seen in *Figure 5.*

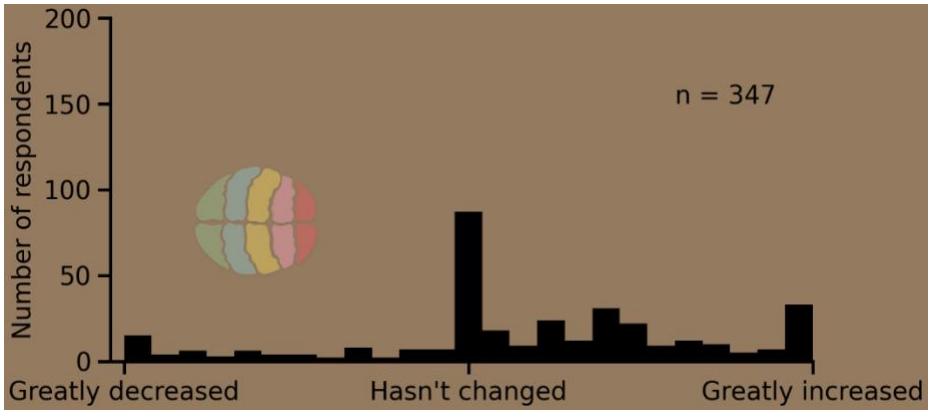

Figure 5. *Changes in participants' vape use since the start of the outbreak*

Question 19: Why did you start vaping nicotine during the outbreak? (select all that apply)

We asked participants who started vaping during the outbreak about their motivations to start using the vape. The most popular reasons to start vaping nicotine were: to have fun (20.2%), to increase creativity (18.0%), to relax or on a night out (12.4%), and to cope with stress (11.2%). A full list of answers is shown in *Figure 6.*

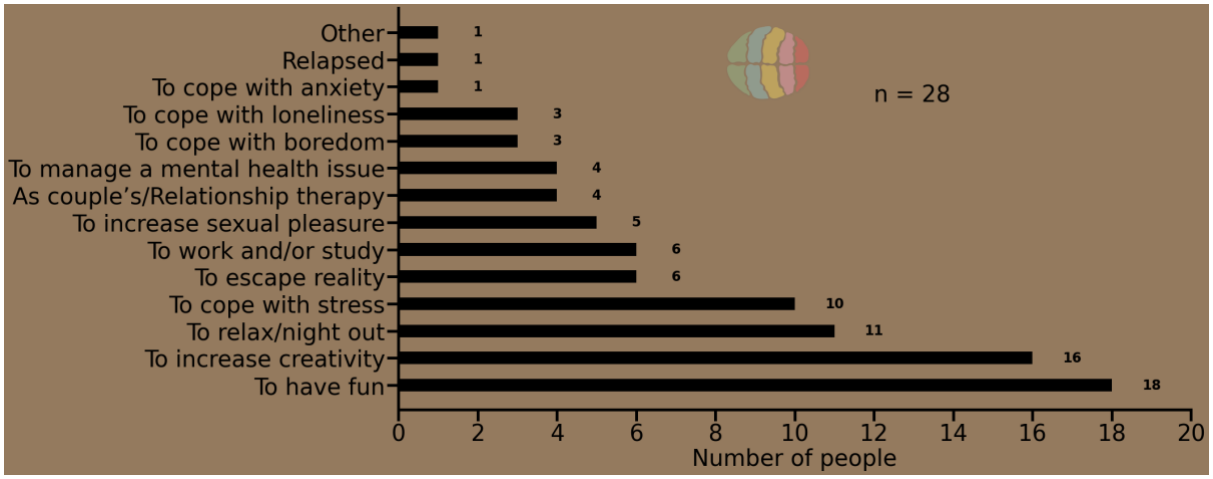

Figure 6. *Participants' motivations to start vaping nicotine during the outbreak*

Trends and changes in other recreational drug use during the outbreak

In this section of our survey, we asked about recreational drug use except for alcohol and nicotine. We specified that the term drugs meant 'recreational drugs excluding alcohol or nicotine'.

Question 20: Have you ever used any drug recreationally (to induce an altered state for enjoyment)?

Regarding recreational drug use, 2140 participants reported to have used a drug to induce an altered state of enjoyment (Appendix Figure 20).

Question 21: Have you used any recreational drugs during the outbreak?

Out of the participants who had ever used a drug recreationally, 1615 reported to take recreational drugs during the outbreak (Appendix Figure 21).

Question 22: What drugs have you used during the outbreak?

The most popular consumed drug was cannabis (83.5%). Participants also commonly used LSD (26.0%), cocaine (21.0%), MDMA (20.3%), and ketamine (16.7%), as shown in *Figure 7.*

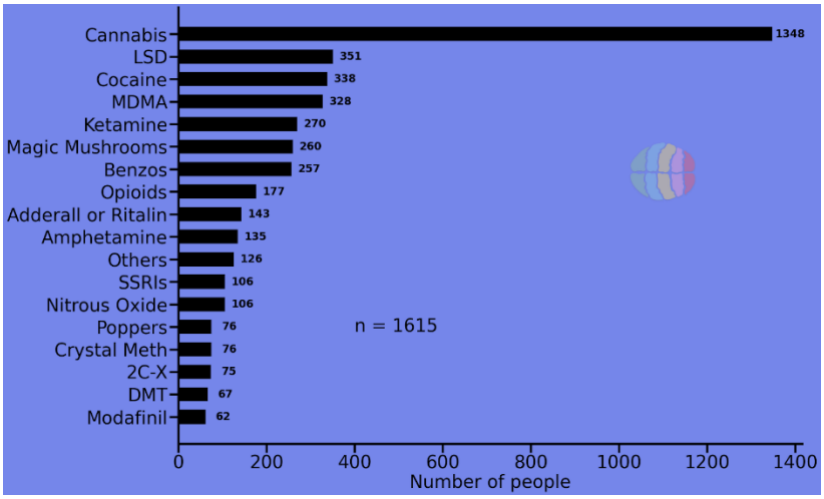

Figure 7. *Most popular recreational drugs participants used since the start of the outbreak*

Question 23: How often do you take each drug during the outbreak?

We asked participants who reported taking drugs how often they did so during the outbreak. The most frequently used drug was cannabis, as 49% of participants reported daily usage and 88% of participants consumed it once a week or more often. Other frequently used drugs were opioids, crystal meth, and benzodiazepines, with 73%, 63% and 57% of users taking them weekly or more often.

The least frequently used drugs were LSD, which was reported to be used only once by 58% of users, mushrooms, with 56% of participants taking them only once, and MDMA, which was taken only once by 54% of users.

Additionally, prescription drugs SSRIs and Adderall or Ritalin were also reported to be taken frequently, as around 94% and 62% participants stated that they take them weekly or more often. *Figure 8* below shows how frequently participants took the 14 most popular drugs during the outbreak.

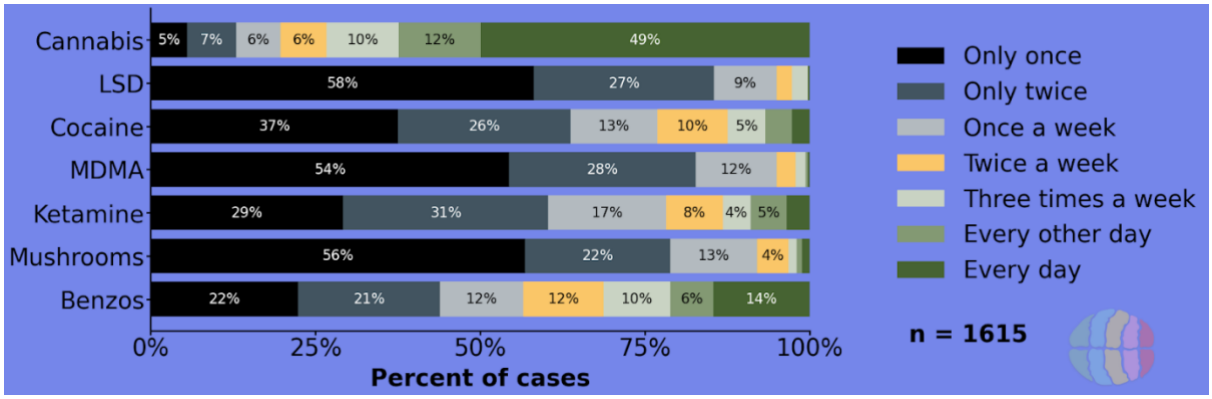

Figure 8a. *Frequency of use of the most popular 7 drugs during the outbreak*

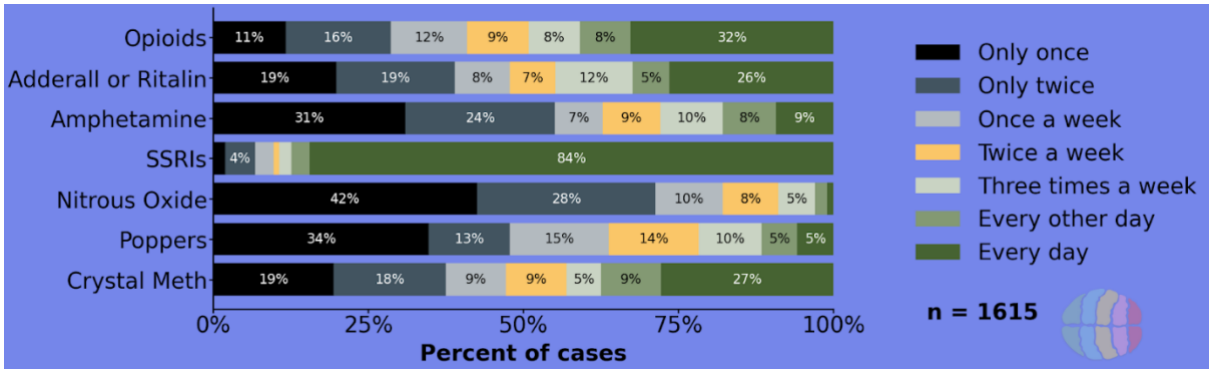

Figure 8b. *Frequency of use of the next 7 drugs by popularity during the outbreak*

Question 24: How has your use of each drug changed during the outbreak?

Participants were asked to rate how their frequency of use of each drug had changed since the start of the outbreak. Participants rated the change by selecting one of the following options: “Greatly decreased”, “Decreased”, “Hasn’t changed”, “Increased” and “Greatly increased”.

The drug with the biggest reported increase in use during the outbreak was cannabis, with 51% of users claiming their consumption greatly increased or increased. Benzodiazepines were used more frequently by 49% of participants, and the use of opioids and crystal meth also showed an increase, as reported by 46% and 43% of participants.

Meanwhile, 33% of participants claimed a great decrease or decrease in their cocaine consumption, 29% of participants consumed less ketamine, and 28% of participants reported a decrease or great decrease in amphetamine use. Changes in use of the 14 most popular drugs can be seen in *Figure 9.*

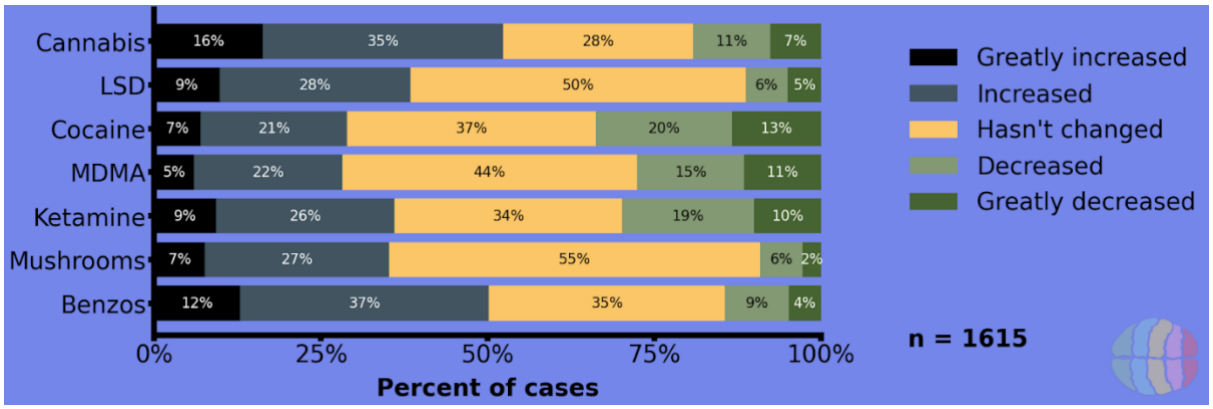

Figure 9a. *Changes in frequency of use of the most popular 7 drugs since the start of the outbreak*

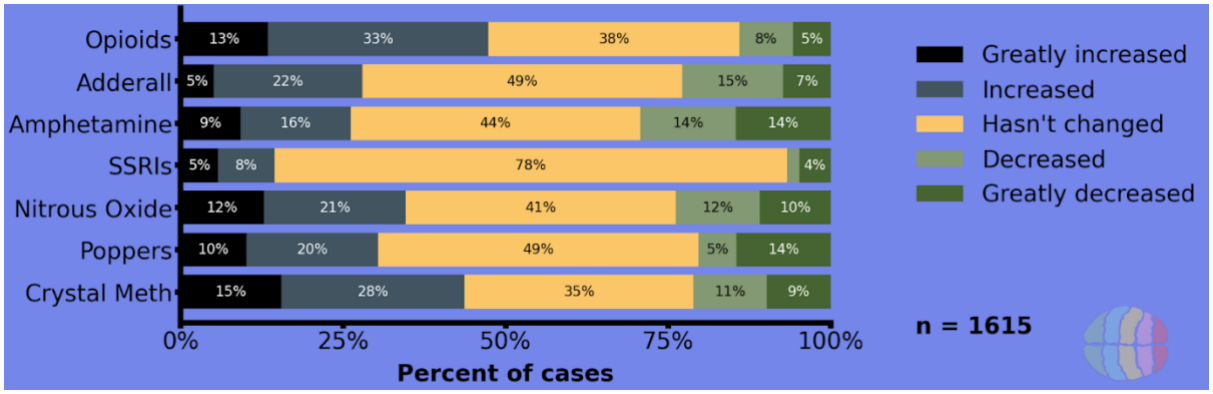

Figure 9b. *Changes in frequency of use of the next 7 drugs by popularity since the start of the outbreak*

Question 25: Have you tried any new drugs while in the outbreak?

246 participants reported having tried at least one new drug during the outbreak (Appendix Figure 22).

Question 26: Which new drugs have you tried during the outbreak?

The most popular drug that people tried for the first time was LSD, 17.6% of participants reported to use it during the outbreak. Psilocybin (12.1%), benzodiazepines (8.8%), opioids (7.7%) and ketamine (7.7%) were also popular drugs which were tried for the first time during the outbreak, as seen in *Figure 10.*

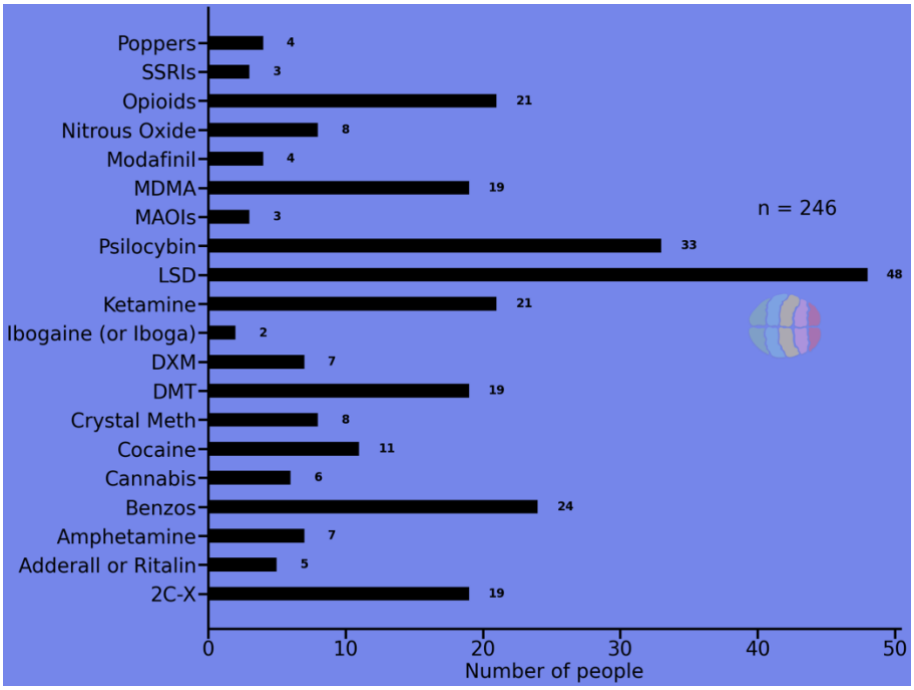

Figure 10. *Number of participants who tried new drugs for the first time during the outbreak*

Question 27: Which of the reasons listed below influence your drug use during the outbreak? (select all that apply)

When asked about the factors influencing drug use during the outbreak, participants most frequently listed 'to have fun' (51.6%), 'to increase creativity' (46.5%), 'to relax, or on a night out' (44.5%), 'to cope with stress' (35.9%), and 'to escape reality' (33.7%), as shown in *Figure 11.*

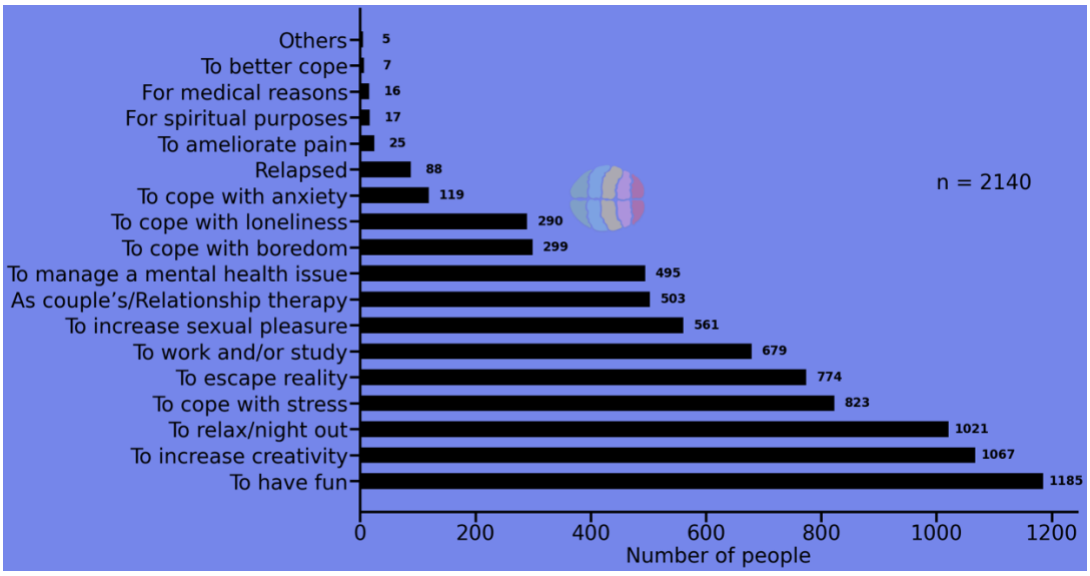

Figure 11. *Factors influencing participants' drug use during the outbreak*

Question 28: Do you use any drugs to self-medicate during the outbreak?

700 participants reported to use drugs to self-medicate during the outbreak (Appendix Figure 23).

Question 29: Which of the reasons below describe your motivation to self-medicate during the outbreak?

When asked about the reasons to self-medicate, participants most commonly answered: 'to sleep' (66.4%), 'to heighten mood or to alleviate symptoms or depression' (61.7%), 'to reduce anxiety (55.9%), and to improve concentration (33.7%), as shown in *Figure 12*.

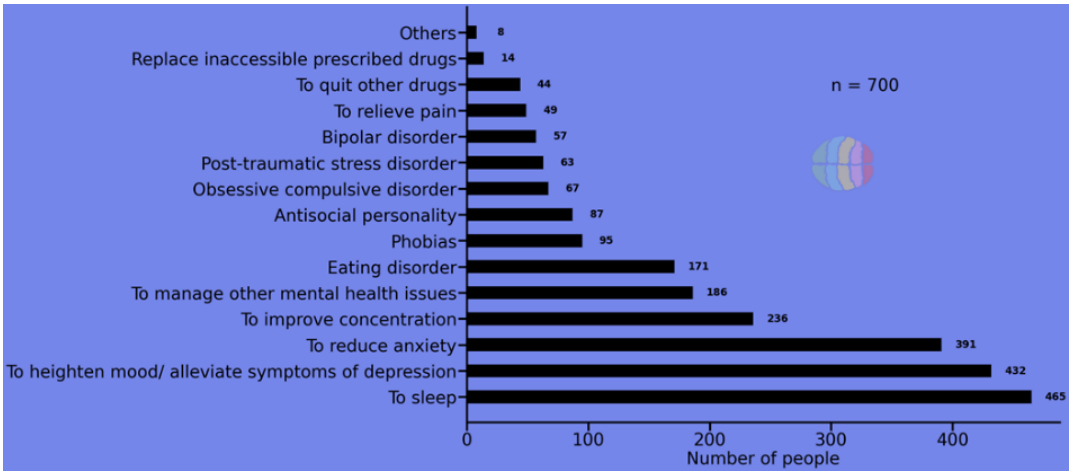

Figure 12. *Participants' motivations to self-medicate during the outbreak*

Question 30: Have you bought any drugs from a new supplier since the start of the outbreak?

310 participants reported to buy drugs from a new supplier since the start of the outbreak (Appendix Figure 24).

Question 31: Do you use any of these techniques when buying from a new supplier?

We asked about the techniques used when buying from a new supplier. Most commonly, 77% of participants reported to usually or always carefully examine the substance by eye. 65% of participants claimed to usually or always ask friends about the seller, and 55% said to usually or always start with a smaller dose than normal. The least popular techniques were sending the substance to a lab service for testing, which was never done by 91% of participants, and testing the substance using home reagent tests, which was never done by 72% of participants (Appendix Figure 25).

Poly drug use during the outbreak

Question 32: If taking recreational drugs during the outbreak, do you drink alcohol as well?

When asked about combining alcohol with other recreational drugs during the outbreak, 41.7% of participants stated that they did not drink alcohol when using other drugs. 30.0% of them reported to drink as much as they would when not taking other drugs, and 28.3% reported to drink, but not as much as they usually would (Appendix Figure 26).

Question 33: What would you consume alcohol with?

The most popular drug participants reported to combine with alcohol was cannabis (73.0%). Additionally, cocaine (35.5%), MDMA (26.4%) and nicotine (25.8%) were also taken when drinking alcohol (Appendix Figure 27).

Question 34: Are you knowledgeable about how the drugs you combine interact?

72.0% of participants claimed to be knowledgeable about drug interactions when combining. 21.0% of participants answered to know a little, 3.6% said they were not knowledgeable, and 3.4% of participants reported to not combine drugs (Appendix Figure 28).

Question 35: What were your most common drug combinations during the outbreak?

The most common drug combination was alcohol and cannabis, as reported by 50.9% of participants. Mixing alcohol and cocaine (12.5%), cannabis and LSD (10.3%), and cannabis and magic mushrooms (5.8%) were also noteworthy combinations. In the heatmap below (*Figure 13*), we show the frequencies of 2-drug combinations. Black cells are 2-drug combinations which were not reported by any participant. A bar chart with the listed combinations can be found in the appendix (Appendix Figure 29).

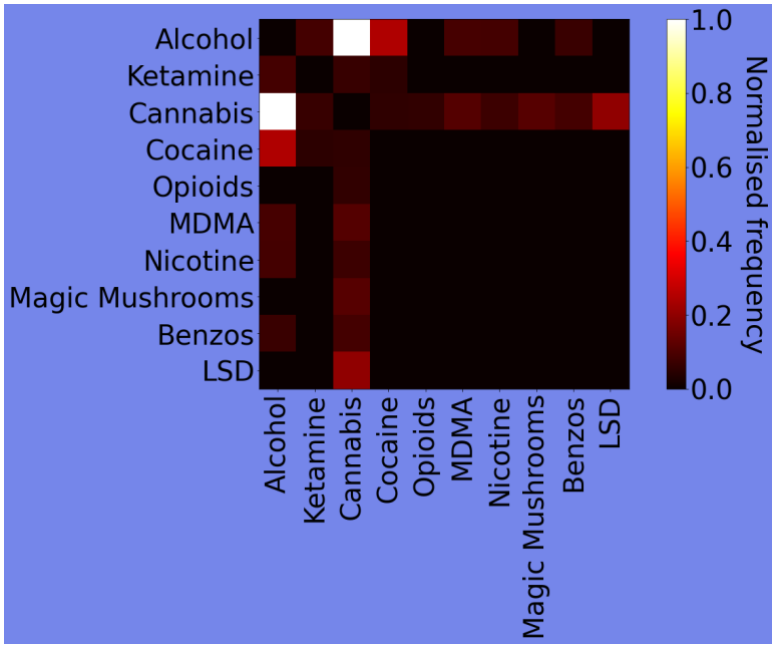

Figure 13. *Heat map of the frequency of 2-drug combinations during the outbreak. The values were normalised by the highest 2-drug combination (alcohol and cannabis).*

Dependence and withdrawal

In this section, the term drug refers to recreational drugs including alcohol and nicotine

Question 36: Do you currently feel dependent on any drug?

When asked whether they felt dependent on any drugs, 48.2% of participants answered they did not. 25.6% of participants said to potentially feel dependent on any drug. 22.8% of them reported to feel dependent on any drug (Appendix Figure 30).

Question 37: Which ones? (From question 36)

As shown in *Figure 14,* cannabis (31.1%), nicotine (11.8%), alcohol (7.7%) and caffeine (6.1%) were the drugs to which participants felt dependent.

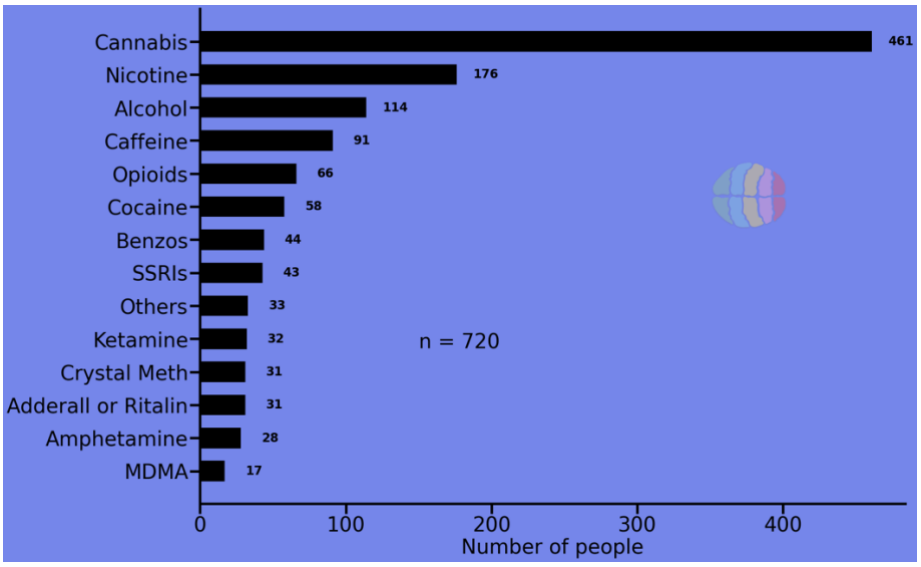

Figure 14. *Most common drugs which participants felt dependent on*

Question 38: Are there any drugs you currently want to stop taking?

426 participants claimed there is at least one drug they wanted to stop taking at the time of completing the survey (Appendix Figure 31).

Question 39: Which ones? (From question 38)

Among participants who wanted to stop taking a drug, cannabis was the most common (27.2%), followed by alcohol (17.4%), cocaine (14.8%), and opioids (10.8%), as shown in *Figure 15.*

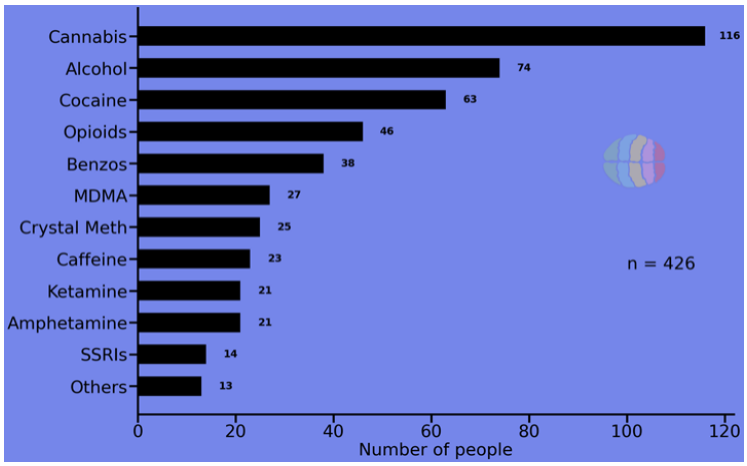

Figure 15. *Most common drugs participants wanted to stop taking*

Question 40: How often during the outbreak have you found that you were not able to control your drug use?

58.6% of participants reported to have never felt that they could not control their drug use during the outbreak 14.2% of participants said to feel like that once, and 10.5% reported it occurred weekly, while 8.1% of participants said to feel no control over their drug use daily (Appendix Figure 32).

Question 41: How often during the outbreak have you needed a drug in the morning to get you going for the rest of the day?

64.0% of participants said to never need to use a drug in the morning to get them going for the rest of the day. 8.1% of participants reported it happening once during the outbreak, and 14.5% of participants said to need it daily (Appendix Figure 33).

Question 42: Have you experienced unintended symptoms of withdrawal since the start of the outbreak?

226 participants reported to have some unintended withdrawal symptoms since the start of the outbreak (Appendix Figure 34).

Question 43: What withdrawal symptoms have you experienced?

Many reported to experience depression, anxiety, and irritability, combined with physical symptoms such as body aches, insomnia, and loss of focus (Appendix Figure 35).

Question 44: During the outbreak, have you failed to do something expected of you because of your drug use?

When asked if, during the outbreak, they have ever failed to do something expected of them because of their drug use, 256 participants reported that it happened once. 101 participants said it happened weekly, and 34 reported that it occurred daily (Appendix Figure 36).

Question 45: How is drug taking affecting your home working/studying habits?

When asked how their working or studying habits had been affected by drug use, 55.4% of participants said these habits were not affected at all. 18.1% claimed drugs were helping them to stay productive, while 14.4% reported that drugs deteriorated their concentration (Appendix Figure 37).

Support from institutions

Question 46: Has your employer/university/school provided you support concerning alcohol and other drugs during the outbreak?

1497 participants stated that they had not received any support concerning alcohol and other drugs during the outbreak. 102 reported to have received support (Appendix Figure 38).

Question 47: Before the outbreak, was there sufficient support for drug-related issues at your workplace/university/school?

1072 participants reported no sufficient support for drug-related issues at their workplace/university/school before the outbreak (Appendix Figure 39).

Question 48: Would you consult your employer/university/school about your drug use?

1419 participants stated that they would not consult their employer/university/school about their drug use, while only 129 said they would (Appendix Figure 40).

Question 49: What discourages you from seeking support from your employer/university/school?

The most important factors discouraging participants from seeking support from their employer/university/school were 'fear of punishment' (40.3%), 'fear of judgement' (36.0%), 'fear of getting the police involved' (26.6%), and 'lack of awareness of what is available' (16.6%). A full list is shown in *Figure 16.*

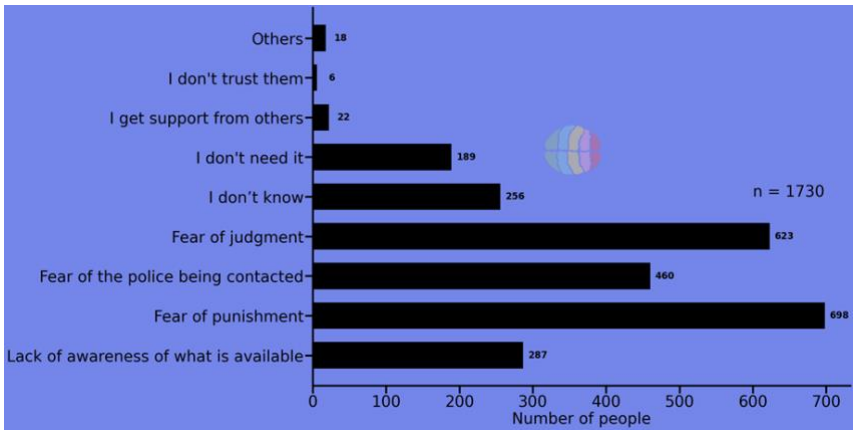

Figure 16. *Reasons discouraging participants from seeking support from their organisation*

Question 50: What would encourage you to seek support from your employer/university/school?

When asked about what would encourage them to seek support from their employer/university/school, participants most commonly reported 'reduced social stigmas

surrounding drugs' (43.9%), 'a wellness oriented drug policy' (40.0%), 'harm reduction or wellbeing events' (38.7%), or 'an open debate about drug use' (32.6%), as shown in *Figure 17.*

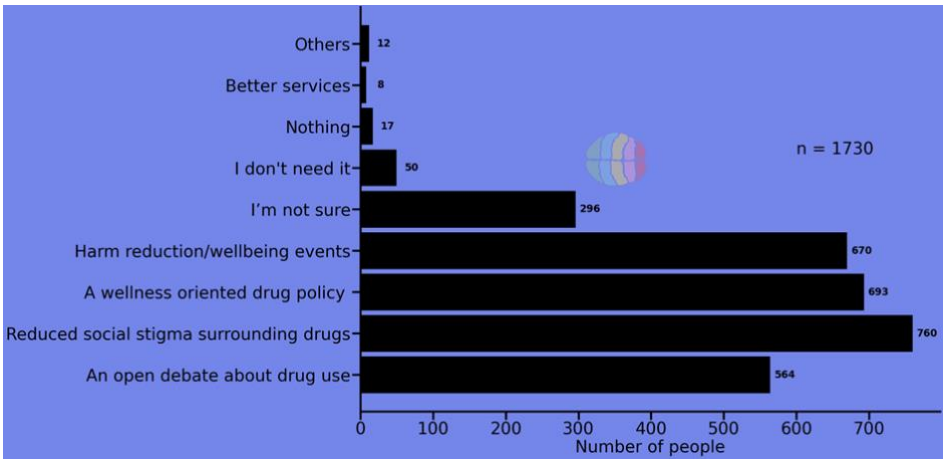

Figure 17. *Factors which would encourage participants to seek support from their organisations*

Discussion

Use and changes

In our survey, the drug consumed by most participants (1755 participants) was alcohol. Cannabis (1348 participants), and nicotine (1121 participants) were also highly popular drugs.

Regarding alcohol use, we found a small group (4.6%) who may have started drinking during the first weeks of the outbreak. We do not know whether these participants had never drunk alcohol before or were breaking a period of abstinence. We also observed alcohol was consumed weekly or more often by 79% of users and around 8% reported daily intake.

Regarding nicotine use, we found a difference in frequency of consumption between participants who smoked and vaped. The most common frequency reported by people who smoked nicotine was 1-4 cigarettes during a day, while the most typical answer for people who vaped nicotine was more than 20 times a day. These patterns of use cannot be compared directly because the quantity of nicotine in a cigarette and a vape differ. There are also differences between brands for each type of method of consumption. However, this result reveals that the pattern of consumption differed for participants in our survey. This difference is likely to also appear in other contexts.

Our results suggest changes in the frequency of use of different drugs. Around half of participants reported an increase in their cannabis use. Additionally, more than 40% of participants reported an increased consumption of benzodiazepines, opioids and crystal meth. On the other hand, one third of people who used cocaine reported a decrease in their consumption. Around 30% of participants reported to take less ketamine and amphetamine during the outbreak.

It is worth noting that the most popular answer for all drugs except for cannabis and benzodiazepines was consistently "Hasn't changed". It would have been interesting to investigate whether the frequency, the quantity or both were the factors explaining the

changes in reported drug use. Recreational drug use is a dynamic behaviour, so it could be that these changes are also seen in periods without major disruptions to day-to-day life. A remaining question is whether these changes are also seen during pandemic-free periods.

Interestingly, among the 246 participants who reported to try a new drug during the outbreak, LSD was the most popular one, which was tried for the first time by 17.6% of participants. Psilocybin (12.1%) and benzodiazepines (8.8%) were also relatively commonly taken for the first time during the outbreak.

Our results regarding recreational drug use are in line with findings of GDS and Crew-2000.

Mental health

In the survey, we also asked participants about their motivations to take drugs. The motivations were mostly positive such as 'to have fun', 'to increase creativity' or 'to relax'. However, some negative motivations such as 'to cope with stress' or 'to escape reality' were more frequently reported than in previous surveys conducted by Drugs and Me[10] and our sibling brand NeuroSight (unpublished). In our previous survey[10], 20% of participants reported to take drugs to help with depression and it was the highest-ranking negative reason. In the present survey, 36% of participants reported to take drugs to cope with stress and 34% reported to take drugs to escape reality.

The uncertainty and loneliness resulting from the economic and health crisis could explain why in this survey we have seen more negative motivations than in previous ones. Drug use is often considered a coping mechanism and people may have relied more on this strategy during the first weeks of the outbreak. This is a worrying situation as stress increases the chances of developing drug-related problems.

If people are exposed to stress for an extended period of time and receive no professional help, they might rely too heavily on 'recreational drugs'. The purpose of consumption becomes medical, not recreational. Strikingly, 44.1% of participants reported to self-medicate. However, an important limitation is that we did not ask what drugs they were using to self-medicate. Another limitation is the lack of a clear definition of self-medication.

Nevertheless, the percentage of negative motivations to use drugs as well as the striking number of people self-medicating call for further research on these aspects of drug use. These results show unmet social and medical needs, which should be tackled from a public health perspective. Better understanding of these behaviours could inform policies and health campaigns surrounding both medical and recreational drugs.

In this survey, the most frequently used drug was cannabis. Almost half of participants were taking cannabis daily. In total, 88% of participants were taking cannabis weekly or more often. Then, we saw that cannabis was by far the most reported drug participants felt dependent on. Additionally, cannabis was also the drug most people wanted to stop taking.

Given the changes in the laws regulating cannabis worldwide, these results should be taken in consideration by policymakers and cannabis companies. While a regulated market might be beneficial from a harm reduction perspective, marketing strategies could worsen the trend in cannabis use that we have seen in this survey. We urge governments and companies to work closely with health and harm reduction organisations in the transition to new ways of trading with cannabis.

Harm reduction at organisations

Poorly managed drug use can deteriorate cognitive abilities such as concentration. It can result in injuries. It can also lead to drug-related disorders and worsen any existing mental health disorders. Overall, these consequences of drug use impact the productivity of people in academic and professional contexts. Ultimately, this has a negative economic impact on organisations. Therefore, it should be a priority for workplaces and educational institutions to support the wellbeing and mental health of their members who need it regarding drug use.

However, more than half of participants had not been offered support regarding drug use before the outbreak of COVID-19. The support seemed to be poorer during the first weeks of the outbreak. Only a small minority of participants reported to have received this type of support since the beginning of the outbreak.

This survey and previous studies by NeuroSight show that fear of judgement and punishment are barriers which discourage people to seek support at their organisations. Therefore, organisations should concentrate to reduce the social stigmas surrounding drug use and review their drug-related policies and processes.

Contact

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References

1. Hamza Shuja, K., Aqeel, M., Jaffar, A., & Ahmed, A. (2020). COVID-19 pandemic and impending global mental health implications. *Psychiatria Danubina*, *32*(1), 32-35.
2. Saltzman, L. Y., Hansel, T. C., & Bordnick, P. S. (2020). Loneliness, isolation, and social support factors in post-COVID-19 mental health. Psychological Trauma: Theory, Research, Practice, and Policy.
3. Carhart-Harris, R. L., Bolstridge, M., Rucker, J., Day, C. M., Erritzoe, D., Kaelen, M., ... & Taylor, D. (2016). Psilocybin with psychological support for treatment-resistant depression: an open-label feasibility study. The Lancet Psychiatry, 3(7), 619-627.
4. Leppink, E. W., Odlaug, B. L., Lust, K., Christenson, G., & Grant, J. E. (2016). The young and the stressed: Stress, impulse control, and health in college students. The Journal of nervous and mental disease, 204(12), 931-938.
5. Lai, H. M. X., Cleary, M., Sitharthan, T., & Hunt, G. E. (2015). Prevalence of comorbid substance use, anxiety and mood disorders in epidemiological surveys, 1990–2014: A systematic review and meta-analysis. Drug and alcohol dependence, 154, 1-13.
6. http://www.globaldrugsurvey.com/downloads/GDS-CV19-exec-summary.pdf
7. https://www.crew.scot/covid-19-survey-month-one-summary/
8. https://www.crew.scot/covid-19-survey-month-two-summary/
9. https://www.europol.europa.eu/publications-documents/eu-drug-markets-impact-of-covid-19
10. https://drugsand.me/documents/3/University_drug_use_survey_2017_UK-_Drugsand.me.pdf