# The 'We Are With You' survey

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#### **EXECUTIVE SUMMARY**

- One third of 18-45-year olds report substantial or severe problem severity scores based on these scores, these respondents could benefit from specialist addiction services
- Cannabis and cocaine were the most commonly reported drugs used during the previous 12 months, and during the previous 12 weeks
- Non prescribed medications were used during the past 12 months across all age groups
- The majority of respondents reported living in large urban and city Local authorities
- The gender ratio reflects known attendance at specialist services
- Suitable accommodation, stable relationships and being employed act as protective factors in relation to DAST-10 problem severity scores and in reported negative health consequences.

We are with you are an independent provider of substance use services. In light of increases in drug related deaths, and some indication of changing patterns in the use of substances, and in the context of government lockdown, this survey provides data on those hidden and hard to reach populations of individuals, who may be experiencing problems with the use of substances, but do not or cannot access help, support and treatment.

A total of 4501 individuals participated in this survey. An amended version of the DAST screening tool was included as part of the survey, and feedback for problem severity scores (PSS) was included with harm reduction advice on how and where to seek support relative to their PSS. The DAST-10 is a globally recognised clinical assessment tool (Addiction Research Foundation, 1982).

In Scotland, the estimated numbers known to use substances in a problematic manner range from 57272 to 89000, based on 3 definitions of problematic substance use (Public Health Scotland, 2020). The current data from Public Health Scotland indicates that 40242 (68% male, and 32% female) individuals attend specialist treatment, with an average age ranging from 35-64 (PHS, 2020). What cannot be estimated in terms of prevalence of the PDU population are data on individuals not engaging and unknown to services.

While responses to the 'We are with you' survey are a fraction of the numbers known to attend specialist treatment for substance use problems, over half of respondents were aged 18-25 (56%), 2762 (62%) were employed. Data on individuals known to specialist treatment services indicates that 253 (19%) were in employment at initial assessment (ISD, 2020).

#### The DAST-10

The Drug Abuse Screening Test (DAST) is a 28-item face valid self-report measure of problematic substance use that is utilised for clinical screening and treatment/evaluation research (Skinner, 1982). Responses to the DAST are given as binary (yes/no) items, each valued at one point, yielding a total score ranging from 0 to 28.

Specific questions were used from an amended version of the DAST help to identify problematic use or use in which an intervention would be recommended. Using an abbreviated version of the DAST, 10 questions were used to gather data on the impact on specific aspects of individual well-being.

The survey included all 10 questions from an adapted version of the DAST-10 allowing a crude measure of drug problem severity from low to severe scores. The DAST-10 scores were seen by each respondent giving them an immediate response to their problem severity score from the DAST-10. The answer included an explanation of what the score might mean in terms of indicators of risk.

Additional questions explored responses to drug use, drug availability, and perceptions of the impact of lockdown on drug price and availability. Questions also allowed respondents to detail which drugs they used in the previous 12 month and previous 12 weeks as crude indicators of use patterns. We also explored if respondents had sought help from their employer, if they knew where to seek help, and gave them a range of help options to rate in rank order. Respondents were asked to indicate which of the 32 local authorities they resided. This allowed us to conduct some depth analysis of the responses using multiple variables, including demographic information, use patterns, DAST-10 problem severity scores, and help seeking knowledge and behaviour.

#### Methodology

The Ethics Committee of the School of Education and Social Sciences, University of the West of Scotland approved this survey (approval number 9688:10391).

We used a quantitative survey design using a non-probability opportunistic sample from a link to SurveyMonkey and made available to respondents using social media, WAWY website and chat facility. While this is a non-purposive sample, the questions were presented to respondents in the form of a quiz to facilitate broad participation and targeted all age ranges over the month that the survey was available via Social Media.

The survey link was made available to respondents for one month from June 2020 and encouraged respondents to click on the link to discover their problem severity scores via a quiz style survey. The link was made available using the following title: 'Help us help more people'. Another campaign used the title: Class A or classy? Another campaign titled 'Sniff or spliff' and a final campaign titled 'Worried about your drug use'. All campaigns generated 9092 link clicks, with 4501 completed survey responses.

The survey comprises of 32 questions, 10 related to DAST-10 score of problem severity, 3 questions related to experiences during lockdown, 7 questions gathered demographic data, and 2 explored

frequency of use of substances. Additional questions explored respondent knowledge and experience of seeking help and support. Out with the DAST-10 we added additional questions exploring respondents perceptions of the negative consequences of their drug use.

#### Why we asked the specific questions

The knowledge of the patterns of drug and alcohol use and misuse in Scotland uses various surveys to collect data that is collated by NHS, ISD Scotland. Additional evidence on patterns of use of people who do not access addiction specialist services is largely unknown. In seeking to understand hidden and hard to reach populations that may experience negative consequences related to their use of substances, this survey seeks to provide evidence of the patterns of use with the aim of developing services to meet the needs of a population unknown to existing services.

#### limitations

We acknowledge that this is not a representative sample of the Scots population, and we acknowledge the potential for response bias due to how and what way the survey was made available to respondents. We also acknowledge that while we do make some generalisable statements in relation to the sample compared to established norms regards the use of substances, this is not a prevalence study.

We recognise that the use of social media may over represent the experiences of common users of social media, young people. However, this survey data provides useful evidence on drug use patterns to develop an understanding of the potential unmet service needs of individuals not captured in existing surveys. An added limitation is the over representation of male respondents, and this may be due to the manner in which we marketed the survey as a discovery of risk related to use of substances.

#### **Results**

4501 respondents took part in the survey. We asked them to complete a series of demographic information questions, questions related to their use of substances, and questions to gather data on the perceived consequences of their use. At the start of the survey, respondents were asked to rank order three words they associated with the use of substances.

#### Q 1: What three words do you or others associate with the use of drugs?

Party Charlie

patsy Alcohol Weed Eccies Gear Night Money Ket Fun Pils Cocaine and Weed High Gear Party Coke Junkie Fun

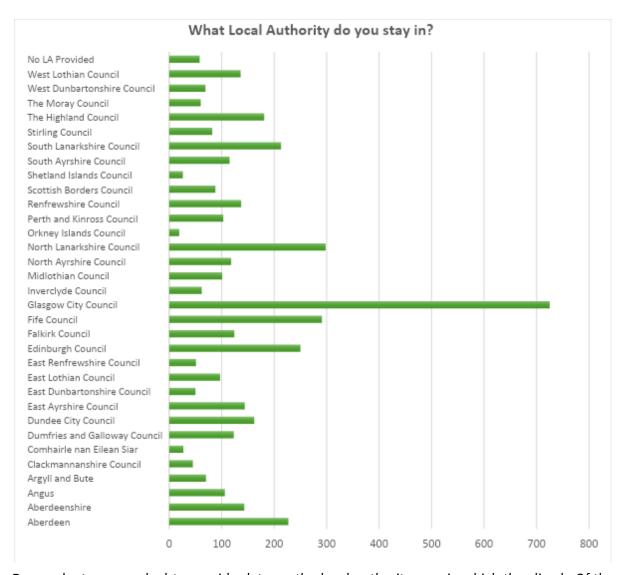
Gear Mandy Coke Cocaine Weed High Party

The data were used to create 3-word clouds. Word cloud 1: the terms associated with use were in rank order: Cocaine, Weed, Gear, Coke, with smaller words including 'good, party and fun. Word cloud 2, respondents associated with use: these include Gear, Coke, Weed, Mandy, cocaine, fun and party.

Word cloud 3 terms include (in rank order) Weed, Gear, Money, Fun, Patsy (Patsy Kline refers to Scots rhyming slang for a line of cocaine), and lesser terms included, party, Charlie, 'eccies' and alcohol.

Overall, the term 'cocaine' was most commonly associated with the use of drugs, and this is reflected in the latest trends documenting use, where the use of opiates are less prevalent than previously in the younger age cohort (ISD, 2019).

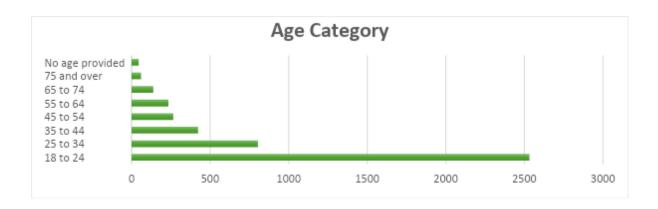
The terms were overwhelmingly positively associated with use including terms such as 'fun', 'party', etc. The only negative term used was 'junkie', and this as common parlance can refer to the use of any drug, not necessarily the use of opiates.



Respondents were asked to provide data on the local authority area in which they lived. Of the 4501 respondents who completed this question, 725 (16%) were resident within Glasgow City local authority area, 298 responses (7%) North Lanarkshire Council, 291 (7%) Fife. The greatest number of responses were from respondents from large urban and City Local Authorities compared to rural and smaller local authorities.

#### Age of respondent

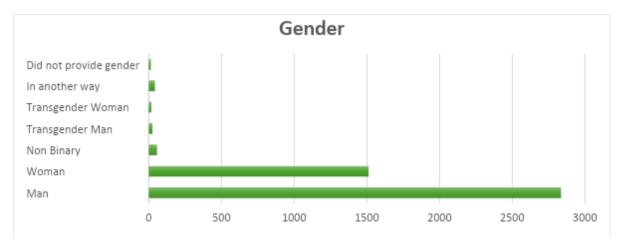
Age	Responses	Percent
18 to 24	2532	56%
25 to 34	804	18%
35 to 44	423	9%
45 to 54	265	6%
55 to 64	234	5%
65 to 74	138	3%
75 and over	60	1%
No age provided	45	1%



Over half of respondents 2532 (56%) were in the 18-24 age group category. 804 (18%) of respondents were in the 25-34 age group category. 423 (9%) of respondents were 35-44 age group category. The remaining age group categories account for 16% of respondents.

#### Gender

Gender	Responses	Percent
Man	2835	63%
Woman	1512	33.6%
Non-Binary	56	1.2%
Transgender Man	25	0.6%
Transgender Woman	17	0.4%
In another way	42	0.9%
Did not answer	14	0.3%



2835 of respondents identified as male (63%) and 1512, (33%) identified as female. The number of respondents who identified as non-binary, or transgender were negligible.

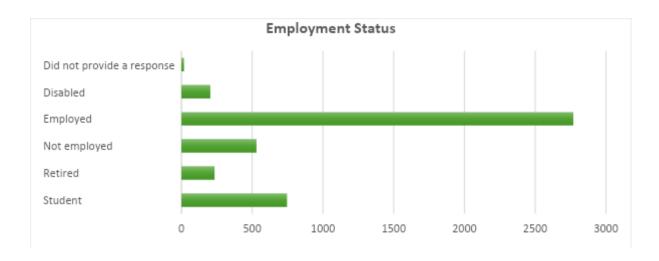
# Ethnicity

Ethnicity	Responses	Percent
White Scottish	3590	80%
White British	501	11%
White English	95	2%
White Irish	57	1%
Pakistani	19	0.4%
Other Asian	7	0.2%
Mixed race white and black Caribbean	12	0.3%
White and black African	12	0.3%
Mixed race white and Asian	22	0.5%
White and other mixed race	20	0.4%
Indian	16	0.4%
Chinese	7	0.2%
Black Caribbean	1	0.002%
Black African	5	0.1%
Bangladeshi	11	0.2%
White other	75	2%
other	37	0.8%
Did not provide a response	14	0.3%

3590 (78%) of participants identified as white Scottish. 501 (11%) of respondents identified within the White British, White English, or White Irish ethnic categories, and 2% identified as 'White Other'. The remaining 5% of respondents identified as a range of different ethnic groups.

# **Employment Status**

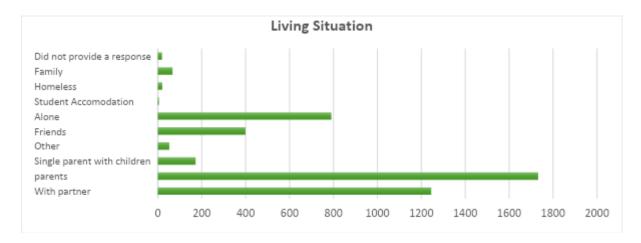
Employment Status	Responses	Percent
Student	746	17%
Retired	234	5%
Not employed	530	12%
Employed	2769	62%
Disabled	204	5%
Did not provide a response	18	0.4%



2769 (62%) respondents were employed. 746 (17%) of respondents were students. 530 (12%) respondents were not employed.

# **Living Situation**

With partner	1245	28%
parents	1732	39%
Single parent with children	172	4%
Other	52	1%
Friends	399	9%
Alone	790	18%
Student Accommodation	5	0.1%
Homeless	20	0.4%
Family	67	2%
Did not provide a response	19	0.4%

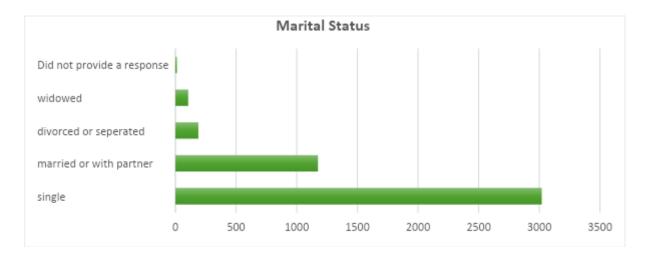


1245 (28%) of respondent report living with a partner, 1732 (39%) of respondents report living with parents, 172 respondents (4%) were single parents, 790 (18%) live alone, 399 (9%) respondents report living with friends, and 5 (0.1%) reported residing in student accommodation.

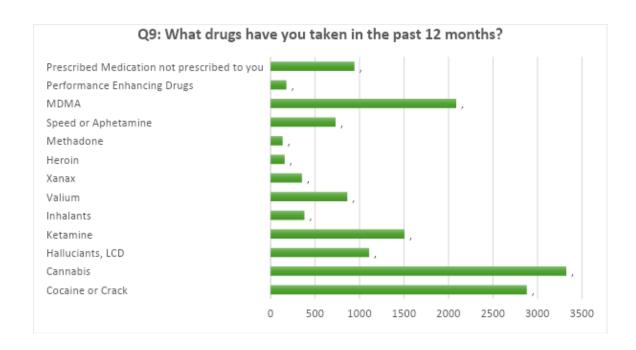
67 (2%) reporting they live with other family members (not parents).

## **Marital Status**

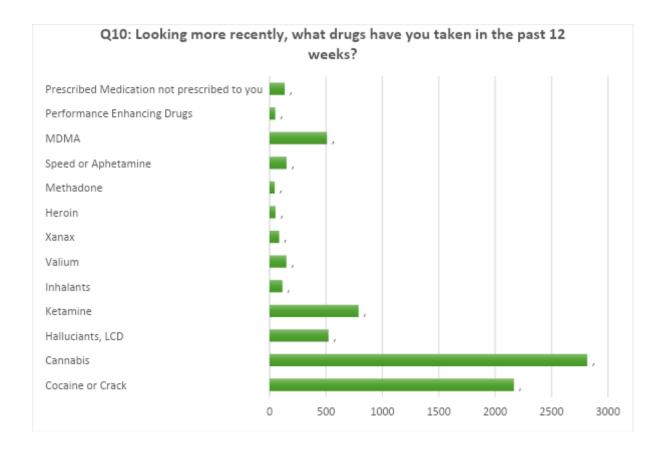
Marital Status	Responses	Percent
single	3020	67%
married or with partner	1175	26%
divorced or separated	189	4%
widowed	105	2%
Did not provide a response	12	0.3%



3020 (67%) of respondents were single. Just over a quarter of respondents 1175 (26%) were married or live with a partner. 189 (4%) divorced or separated, 105 (25) widowed, and 12 (0.3%) did not respond.



2880 (64%0 of respondents reported using cocaine (including crack) in the previous 12 months, 3322 (74%) reported the use of cannabis, 2086 (46%) report the use of MDMA, 1505 (33%) reported the use of Ketamine, 1107 (25%) reported the use of LSD, 942 (21%) report the use of prescribed medications not prescribed to them specifically, 862 (19%) reported the use of Valium.



2816 (63%) of respondents report the use of cannabis in the previous 12 weeks, 2166 (48%) cocaine (inc. crack), 789 (18% used Ketamine, 509 (11%) report the use of MDMA. It is worth noting that 134 (3%) of respondent report the use of non-prescribed medications.

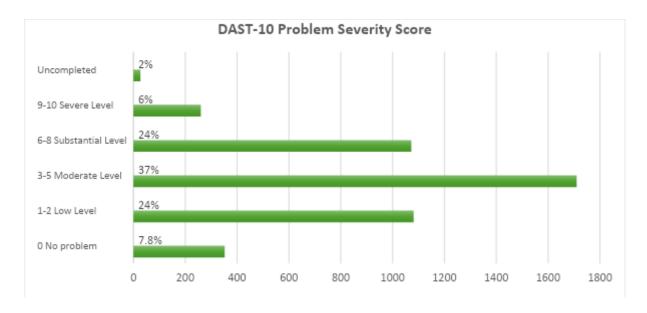
Reported use of non-prescribed medication by age category during past 12 months			
Age	Responses	Percent	
18-24	462	18%	
25-34	204	26%	
35-44	110	26%	
45-54	50	19%	
55-64	36	15%	
65-74	28	20%	
75+	28	47%	

In calculating the reported use of non-prescribed drug by age category, it is worth commenting that the percentage is a calculation of the percentage amount of that age category that report use of non-prescribed medication. In all age categories, there is a one fifth (around 20%) reporting use of non-prescribed medication, however 28 (47%) of over 75's reported the use of non-prescribed medications.

#### DAST-10 scores

The following question (11-21) in the survey were adapted from the DAST-10 screening tool<sup>1</sup>, which gives a rating of problem severity from 0-10.

Respondent DAST-10 Problem Severity Score		
0: No problem	352	8%
1-2: Low Level	1081	24%
3-5: Moderate Level	1710	37%
6-8: Substantial Level	1072	24%
9-10: Severe Level	260	6%
Not answered	27	2%



#### **DAST 10 Scores**

The survey used an amended version of the DAST-10 problem severity tool. Participants completed a ten-item survey questionnaire to calculate their unique DAST-10 score. Results were categorised into problem severity level. The DAST 10 problem severity scores are 0 = no problem, 1-2 low problem severity, 3-5 medium problem severity, 6-8 substantial problem severity, and 9-10 severe problem severity.

1081 (24%) respondents who completed the DAST-10 questions scored low-level problem severity. 1710 (37%) respondents indicated moderate problem severity; 1072 (24%) respondents scored substantial problem severity. Finally, 260 (6%) had severe problem severity DAST-10 scores.

Nearly two thirds of respondents who took part do not score a DAST 10 indicating a high problem severity level. However, almost one third of respondent DAST 10 scores report substantial or severe

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<sup>&</sup>lt;sup>1</sup> Addiction Research Foundation (1982)

problem severity. Those respondents with a DAST-10 score above 6 (substantial or severe) would benefit from addiction services provision based on their problem severity score ratings.

DAST-10 substantial and severe problem severity scores by age category		
Age category	Substantial scores	Severe scores
18-24	653 (26%)	127 (5%)
25-34	224 (28%)	61 (8%)
35-44	109 (26%)	39 (9%)
45-54	46 (17%)	18 (7%)
55-64	23 (10%)	6 (3%)
65-74	7 (5%)	2 (1%)
75+	7 (12%)	2 (3%)

Respondents completing the DAST-10 questions were given a problem severity score 0-10. 0 indicates no problem, with a score of 10 indicating the highest rating of problem severity. Mean scores were then calculated for age category.

Local Authority Area	Substantial level	Severe level	Percentage
Aberdeen	65 (29%)	12	5.3
Aberdeenshire	32 (2%)	6	4.2
Angus	26 (24%)	3	2.8
Argyll and Bute	14 (20%)	6	8.6
Clackmannanshire Council	08 (18%)	1	2.2
Comhairle nan Eilean Siar	06 (22%)	3	11.1
Dumfries and Galloway Council	23 (19%)	4	14.8
Dundee City Council	34 (21%)	9	5.6
East Ayrshire Council	37 (26%)	8	5.6
East Dunbartonshire Council	10 (20%)	2	4.0
East Lothian Council	24 (25%)	6	6.2
East Renfrewshire Council	17 (33%)	5	9.8
Edinburgh Council	62 (25%)	11	4.4
Falkirk Council	30 (25%)	4	3.3
Fife Council	74 (25%)	13	4.5
Glasgow City Council	177 (22%)	40	5.0
Inverclyde Council	14 (23%)	2	3.2
Midlothian Council	22 (22%)	3	3.0
North Ayrshire Council	29 (25%)	8	6.8
North Lanarkshire Council	70 (24%)	29	9.7
Orkney Islands Council	06 (32%)	3	15.8
Perth and Kinross Council	30 (29%)	8	7.8
Renfrewshire Council	33 (24%)	7	5.1
Scottish Borders Council	24 (28%)	8	9.1
Shetland Islands Council	05 (19%)	2	7.7
South Ayrshire Council	25 (22%)	11	9.6
South Lanarkshire Council	49 (23%)	14	6.6
Stirling Council	21 (26%)	5	6.2
The Highland Council	38 (21%)	12	6.6
The Moray Council	12 (20%)	4	6.7
West Dunbartonshire Council	19 (28%)	3	4.3
West Lothian Council	31 (23%)	10	7.4

We calculated the number of people who scored high, i.e. substantial, and severe DAST-10 scores to estimate the number of respondents who would require specialist services in that local authority area. From this data we created the table above. 27% of respondents resident in Glasgow would require specialist addiction services. From these calculations, we estimate that one third of all respondents would require help from specialist services across all local authority area for the reported (substantial and severe) DAST-10 problem severity scores.

We reproduce the DAST-10 problem severity scores for gender reporting on substantial and severe (scores ranging from 6-10), and we combine these to determine the approximate number of respondents reporting problems that would normally require specialist support.

Gender	Substantial level	Severe level
Man	757 (27%)	180 (6%)
Woman	280 (19%)	66 (4%)
Non-Binary	14 (25%)	07 (13%)
Transgender Woman	06 (24%)	03 (12%)
Transgender Man	04 (24%)	01 (6%)

From the above table we can see that 937 (33%) of males and 346 (23%) of females would require assistance from alcohol and drug services, based on their DAST-10 problem severity score. Nine respondent who are transgender women and 5 transgender man would require help from specialist services.

Q11: Have you used drugs other than those required for medical reasons?			
Frequency Percent			
No	1556	35%	
Yes	2945	65%	

Q12.	Do you take more than one drug at a time?			
	Frequency Percent			
No		2053	46%	
Yes		2448	54%	

Q11 data indicates that 2945 (65%) respondents report the use of prescribed drugs for non-medical reasons. Data from Q12 indicates that 2448 (54%) of respondents report the use of more than one drug (poly-drug use).

Q13. Are you able to stop using drugs when you	Are you able to stop using drugs when you want to?			
Frequency Percent				
No	809	18%		
Yes	3667	82%		
No response	25	0.6%		

This question explores if the use of drugs leads to an inability to refrain, one of the classic reported symptoms of addiction or dependence. 809 (18%) of respondents indicate that they are unable to refrain from the use of substances.

Q14.	Have you ever had blackouts or flashbacks as a result of drug use?		
Frequency Percent			
No		2743	61%

Yes	1758	39%

The DAST-10 includes this question asking respondents to consider the negative consequences of the drug and alcohol use. There are many major differences between blackouts and flashbacks, what the data from this question allow us to do is consider the negative consequences of the use of substances. 1758 (39%) of respondents report experiencing blackouts or flashbacks (a proxy for negative consequences) attributable to their use of substances.

Q15.	Do you ever feel bad or guilty about your drug use?		
Frequency Percent			
No		2243	50%
Yes		2258	50%

This question is also part of the DAST-10, explores respondents perceptions of feelings of guilt or shame at their inability to control their use, behaviour while intoxicated, and the impact of their use on others.

Q16: Has your partner/parents/friends ever complained about your involvement or use of drugs?		
	Frequency	Percent
No	2430	54%
Yes	2071	46%

This question (part of DAST-10) explores the negative impact of substance use on a significant other.

Q17: Have you ever missed work/scho	Have you ever missed work/school/college/uni as result of drug use?		
Frequency Percent			
No	2750	61%	
Yes	1751	39%	

This question explores the negative impact of substance use on work or study. 1751 (39%) of respondents report that their use impacts negatively on their work or study. Given the answer only relates to work and study, the results are only attributable to respondents who are students, or in employment. 746 (17%) were students, 2769 (62%) reported being in paid employment, therefore we can suggest that the answers to this question relate more to the negative impact of substances on employment or studying.

Q18.	Have you engaged in illegal activities in order to obtain drugs?			
	Frequency Percent			
No		3227	72%	
Yes		1274	28%	

Just under one third 1274 (28%) of respondents indicate that they associate their use with criminality.

This question infers that there is a corelation between use and criminality, however what the data cannot indicate if the answers refer to the possession of drugs (a crime within the confines of the Misuse of Drugs Act 19971), or to acquisitive crime associated with the belief that users need to commit crime to 'feed their habit'.

Q19.	Have you ever experienced withdrawal symptoms when you stopped taking drugs?			
	Frequency Percent			
No		3142	70%	
Yes		1358	30%	

This question typically as part of the DAST-10 allows respondents to focus on the negative physical symptoms of the use of drugs, most often withdrawal is associated with alcohol and or opiates. As so few of respondents indicated a use of opiates, then what this data reveals is unclear, and is most useful in calculating the overall problem severity score. That said, 1358 (30%) report experiencing physical withdrawal symptoms attributed to their use of substances.

Q20. Have you had medical problems as a result of your drug use (e.g. memory loss, hepatitis, seizures, bleeding, paranoia, panic attack, palpitations?				
Frequency Percent				
No 2942 65%				
Yes 1559 35%				

This question (part of the DAST-10) explores the negative consequences (requiring medical help or assistance) respondents attribute to their use of substances. 1559 (35%) respondents report experiences one of a range of symptoms that they perceive require medical assistance or help.

Q21: Have you ever suffered any of these symptoms due to your use of drugs or alcohol?			
	Frequency	Percent	
Blackouts	1652	37%	
Flashbacks	838	19%	
Convulsions	192	4%	
Overdose	261	6%	
heart problems/shortness of breath	869	19%	
Anxiety	2522	56%	

In addition to asking about the use of substances requiring in their opinion medical help, this question seeks to elicit the respondents perception of the physical and psychological negative consequences of substance use. In the previous question 1559 (35%) respondents indicated that they experienced medical problems as a result of their use of substances. However, this question seeks to unpack what these medical problems might actually be. The data from this question indicates a greater number of respondents reporting blackouts 1652 (37%) that had previously reported medical problems associated with their use 1559 (35%). This raises issues in relation to the veracity of the answers to these questions exploring negative physical symptoms associated

with the use of substances. 2522 (56%) report experiencing anxiety attributable to their use of substances. While anxiety is not a medical diagnosis, anxiety is a normal human experience, however what is unclear from this data is how severe the reported anxiety is, and what is the cause of the anxiety. The reported anxiety may not be solely attributable to the use of substances, and could be a result of other negative impacts, such as the illegality of drugs, the impact of use on friends family and significant others, and to the very real experiences of guilt and shame associated with the linking of drug taking to criminality.

## Exploring Respondents help seeking knowledge and behaviour

Q22: Have you ever sought help regarding your drug use?			
	Frequency	Percent	
No	3834	85%	
Yes	613	14%	
Did not answer question	54	1%	

This is interesting as 30% of respondents who score a substantial or severe DAST-10 problem severity score indicate that they require help, this large number of respondents stating that they have not sought help has to be explained.

Respondent data indicating negative consequences of the substance use on a range of factors summarised by Ron Roizen as liver (physical) lover (relationships) legal, livelihood (work, study, and benefits) suggests that there are many negative reported consequences they attribute to their substance use. However, 3834 (85%) indicate that they have never sought help for their substance use. What this might mean is unclear. They may attribute the negative consequences of the substance use as a temporary phenomenon, which they can change when they want or choose to, or that they have not experienced significant negative consequences over a significantly long period, or that the existing services would not meet their needs. Finally, we cannot discount the negative impact of stigma and discrimination experienced by service users in contact with services, and how and on what way drug users are negatively portrayed in mass media, may be acting as a significant barrier to help seeking.

Q23-24: If you thought your drug use and or drinking was causing you problems would you seek help from your employer/college/uni?		
	Frequency	Percent
No	1773	52%
Yes	1614	48%

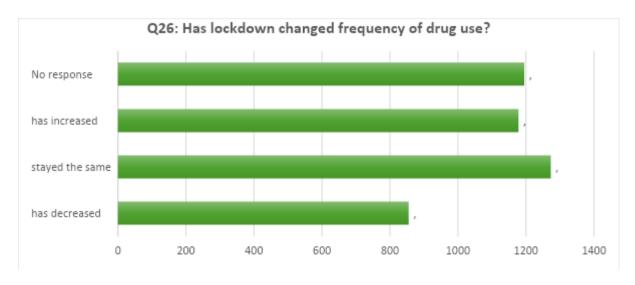
1773 (52%) respondents who answered the question indicated that they would not seek help from their employer or university. 1614 (48%) respondents indicated that they would seek help from their employer.

These answers require some explanation. Over half (52%) indicate that they would be reluctant to seek help from their employer. There are significant barriers in seeking help from an employer. One clear danger is that the employer, rather than providing help and support would seek to dismiss the employee, particularly of the employee was on a short term, fixed term, or zero-hour contract. In addition, the answer to this question may also be a proxy indicator of the stigma associated with seeking help.

## Respondent perceptions of Lockdown

We asked the following questions of respondents in relation to the use of drugs, knowledge of price change, and availability of drugs.

Q25. During lockdown drugs have become harder to get		
	Responses	Percent
strongly disagree	646	14%
disagree	927	21%
neutral	950	21%
agree	598	13%
strongly agree	200	4%
No response	1180	26%



1273 (28%) of respondents indicated that lockdown had no impact on the frequency of their use of drugs. 1178 (26%) indicated that their use had increased, while 855 (19%) reported a reduction in use due to lockdown.

Q27. During lockdown drug prices have, increased, stayed, the same or no change?		
	Response	Percent
decreased	81	2%
stayed the same	2172	48%
increased	998	22%
No response	1250	28%

2172 (48%) of respondent report that drug prices have stayed the same, 998 (22%) report that lockdown has increased the price of drugs, while 81 (2%) report that drug prices have reduced as a result of lockdown.

Q28. During lockdown drugs have become harder to get			
	Response	Percent	
strongly disagree	646	14%	
disagree	927	21%	
neutral	950	21%	
agree	598	13%	
strongly agree	200	4%	
No response	1180	26%	

A small number of respondents 598 (13%) report that drug availability has decreased become harder, while 646 (14%) report that drugs have become more available.

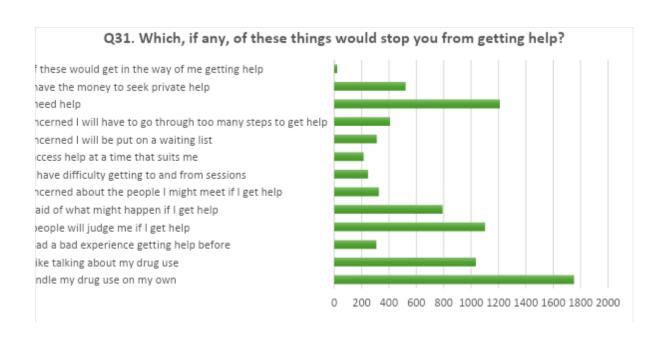
## RESPONDENTS KNOWLEDGE OF HELP AVAILABILITY

Q29.Would you know where to go (without having to check) if you drug use?	u needed hel	p with your
No	1198	27%
Yes	2136	48%
No Response	1167	26%

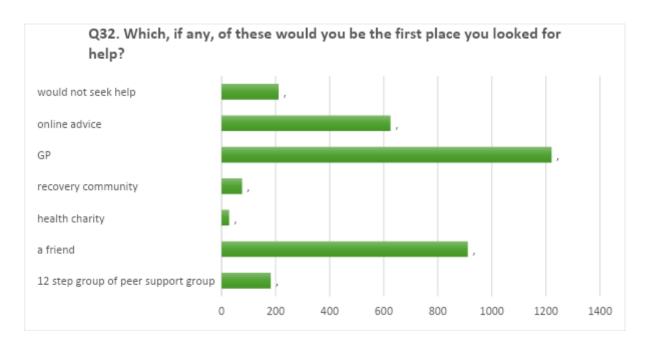
1198 (27%) of respondents reported that they did not know where to find help, while 2136 (48%) indicated that they would know where to seek help. 1167 (26%) respondents did not complete the question. This may indicate a need to provide education on where and how to find help at a population level.

Q30. To what extent to do you agree or disagree with the following statement: I would know where to go (without having to check) if I needed help with my drug use			
Strong agree	544	12%	
Agree	1054	23%	
Neutral	738	16%	
Disagree	614	14%	
Strongly Disagree	357	8%	
Did not answer	1194	27%	

When looking more closely at whether respondents would know where to seek help without having to check, 1598 (25%) of respondents indicated that they strongly agreed or agreed with this statement. 971 (22%) indicated that they strongly disagreed or disagreed with the statement. 738 (16%) of respondents reported that neither agreed nor disagreed. This may reveal a requirement for a whole population level approach associated with the use of other drugs, including those controlled within the Misuse of Drugs Act 1971.



In repose to this question 1752 (39%) respondents noted that they perceive being able to handle their drug use on their own, 1210 (27%) stated they do not require help, 1102 (25%) believe that they will be judged (experience stigma), 1035 (23%) state that they would not like to have to speak to anyone about their use of substances, while 792 (18%) state that they are afraid of being judged if they sought help for the substance use.



1221 (38%) of respondents would seek help first from a GP, 911 (28%) would seek help from a friend, 625 (19%) would seek help from an online source, 211 (7%) would not seek help, while 182 (6%) would seek help from a 12 step group, and finally 76 (2%) would seek help from a recovery community. From these results we can form the impression that these respondents would not seek help from 'traditional', or 'recovery' community services.

## DAST-10 mean score statistical tests

#### **Inferential Statistics**

In addition to carrying out descriptive statistics inferential statistical tests were conducted. Inferential statistics allows tests to be carried out to reach conclusions that are beyond descriptive and frequency data. For example, we use inferential statistics to make inferences from the sample data on the perceptions of the respondents on a range of variables. Or we use inferential statistics to make judgments of the probability that an observed difference between groups is valid and reliable rather than occurring by chance. Thus, we use inferential statistics to make inferences from our data to make tentative generalisations, acknowledging the limitation of the sample recruited into this study.

#### **Explanation of Statistical Test and Values**

Although reporting mean scores are useful, it is also beneficial to compare the difference between mean scores of more than two groups. A statistical test called ANOVA is used to undertake this analysis. ANOVA examines variation in the data and provides a numerical value on the variation. Specifically, ANOVA compares the amount of variation between and within groups.

In ANOVA, the dependent variable is the continuous measure (DAST-10 mean score, negative health consequences mean score) The independent variables in ANOVA are the categorical variables. For example, age gender, ethnicity local authority area, etc.

#### **Effect Size**

In addition to ANOVA, the effect size has also been calculated. Effect size is a simple way of quantifying the difference between two groups. This has many advantages over the use of tests of significance alone. Effect size emphasises the size of the difference between the groups.

#### P Value

When a hypothesis statistical test is conducted, a p-value helps determine the significance of results. Statistical tests are used to test the validity of a claim that is made about the variable that is being tested. A small p-value (typically  $\leq 0.05$ ) indicates strong evidence. A large p-value (> 0.05) indicates weak evidence. P-values very close to the cut-off (0.05) are considered to be marginal (could go either way). These statical test results are presented in Appendix 1.

# Discussion

From a total of 4501 respondents, 16% were resident within Glasgow City local authority area, 7% were resident in North Lanarkshire Council, and 7% reported being resident in the Fife local authority area. The largest numbers of respondents lived in large urban local and city local

authorities compared to smaller numbers of respondents report residing in rural and smaller local authority areas.

Over half of respondents (56%) were aged 18-24. 18% of respondents were aged 25-34. 9% of respondents were 35-44. The remaining age group categories account for 16% of respondents. The large number of responses from the 18-34 age categories could be explained by the media platform (Facebook) used to recruit participants, and in the manner in which the survey was made available to them, as a quiz to test their substance use problem severity.

63% of respondents identified as male and 33% identified as female. The number of respondents who identified as non-binary, or transgender were negligible. 95% of respondents identified as white Scottish or white other, 5% of respondents identified as another ethnic identity category. This representation is broadly similar to the gender and ethnicity breakdown that presents to specialist addiction service providers in Scotland (NHS ISD Scotland, 2020)

62% respondents were employed, 17% were students, and 12% of respondents reported not being employed.

28% of respondents report living with a partner, 39% report living with parents, 18% live alone, 9% report living with friends, while 2% reported living with other family members (not parents, and 0.1% respondents reported residing in student accommodation.

67% of respondents were single. Just over a quarter of respondents (26%) were married or live with a partner, 4% were single parents, 4% divorced or separated, 25% were widowed, and 0.3% did not respond.

When asked about the use of drugs in the last 12 months, 64% of respondents reported using cocaine (including crack), 74% reported the use of cannabis, 46% reported the use of MDMA, 33% reported the use of Ketamine, 25% reported the use of LSD, 21% report the use of prescribed medications not prescribed to them specifically, and 19% reported the use of Valium.

When asked about Drug use in the past 12 weeks 63% of respondents report the use of cannabis 48% cocaine (inc. crack), 18% reported the use of Ketamine, 11% reported the use of MDMA, while 3% of respondents report the use of non-prescribed medications in the 3 months prior to taking the survey.

In all age categories, one fifth (around 20%) report use of non-prescribed medication, however 47% of respondents aged over 75 reported the use of non-prescribed medications.

## Overall DAST-10 problem severity scores

1081 (24%) respondents who completed the DAST-10 questions scored low-level problem severity. 1710 (37%) respondents DAST-10 scores indicate moderate problem severity, with 1072 (24%) of respondents rating their use as substantial problem severity. Finally, 260 (6%) of respondents scored as severe on the DAST-10 questions.

Almost one third of respondent DAST-10 scores scored high i.e. a substantial or severe problem severity. Those respondents with a DAST-10 score above 6 (substantial or severe) may benefit from addiction services provision based on their problem severity score ratings.

When examining the DAST-10 problem severity scores by age, around one third of respondents aged under 45 scored problem severity scores indicating a requirement for assessment and treatment from specialist treatment providers.

#### Other negative consequences of the use of substances:

- 809 (18%) of respondents indicate that they are unable to refrain from the use of substances. This may be an indication of possible drug dependence.
- 50% of respondents reported feeling guilt or shame, associated with their use.
- Just under half (46%) report their use of substances negatively impacting on a significant relationship.
- 40% report missing work due to the use of substances.
- 28% of respondents answered yes to the question do you engage in illegal activity due to their use of substances.

However, what the data cannot indicate is if the answers refer to the possession of drugs (a crime within the confines of the Misuse of Drugs Act 1971), or an acquisitive crime.

- 1358 (30%) report experiencing physical withdrawal symptoms attributed to their use of substances.
- 1559 (35%) respondents report experiencing one of a range of symptoms that they perceive require medical assistance or help.

In addition to asking about the use of substances that in their opinion require medical help, the respondents were asked to consider the physical and psychological consequences of substance use. A greater number of respondents report experiencing blackouts 1652 (37%) than had previously reported medical problems associated with their substance use 1559 (35%). This raises issues in relation to the veracity of the answers to these questions exploring negative physical symptoms associated with the use of substances.

• 2522 (56%) report experiencing anxiety attributable to their use of substances.

While anxiety is a normal human experience, what is unclear from this data is how severe the reported anxiety is, and what respondents perceive is the cause of the anxiety. The reported anxiety could be a result of other negative factors associated with the use of substances, such as the illegality of certain controlled drugs reported as used, the impact of use on friends family and significant others, and to the very real experiences of guilt and shame associated with the linking of some drugs to crime.

- 30% of respondents who score a substantial or severe DAST-10 problem severity score indicate that they require help.
- 14% of respondents have sought help for the use of substances,

The large number of respondents stating that they have not sought help (85%) has to be explained. Respondent data indicating negative consequences of the substance use on a range of factors summarised by biological, psychological, and social negative reported consequences that respondents attribute to their substance use. What this might mean is unclear. Respondents may consider the negative consequences of the substance use as a temporary phenomenon, which they can change when they want or choose to, or that they have not experienced significant negative consequences over a significantly long period, or that existing services would not meet their needs. Finally, we cannot discount the negative impact of stigma and discrimination experienced by service users in contact with services, and how and on what way drug users are negatively portrayed in mass media, which may be acting as a significant barrier to help seeking.

- 1773 (52%) respondents would not seek help from their employer or university.
- 1614 (48%) respondents indicated that they would seek help from their employer.

These answers require some explanation. Over half of respondents indicate that they would be reluctant to seek help from their employer. There are significant barriers in seeking help from an employer. One clear barrier is that the employer, rather than providing help and support would attempt to dismiss the employee, particularly if the employee was on a short, fixed, or zero-hour contract. In addition, the answer to this question may also be a proxy indicator of the stigma associated with seeking help.

#### Dast-10 problem severity scores by Local Authority

27% of respondents resident in Glasgow have DAST-10 problems severity scores that require specialist addiction services. From these calculations, we estimate that one third of all respondents would require help from specialist services across all local authority areas for the reported (substantial and severe) DAST-10 problem severity scores.

## Dast-10 severity scores by gender

937 (33%) of males and 346 (23%) of females would require assistance from alcohol and drug services, based on their DAST-10 problem severity score.

Nine transgender women and 5 transgender men have DST-10 scores that would require help from specialist services.

### Respondents knowledge of help availability

1198 (27%) of respondents reported that they did not know where to find help, while 2136 (48%) indicated that they would know where to seek help.

1167 (26%) respondents did not complete the question. This may indicate a need to provide education on where and how to find help at a population level.

When looking more closely at whether respondents would know where to seek help without having to check, 1598 (25%) of respondents indicated that they strongly agreed or agreed with this statement. 971 (22%) indicated that they strongly disagreed or disagreed with the statement. 738 (16%) of respondents reported that neither agreed nor disagreed. This may reveal a requirement for a whole population level approach associated with the use of other drugs, including those controlled within the Misuse of Drugs Act 1971.

- 1752 (39%) respondents noted that they perceive being able to handle their drug use on their own
- 1210 (27%) stated they do not require help
- 1102 (25%) believe that they will be judged (experience stigma)
- 1035 (23%) state that they would not speak to anyone about their use of substances
- 792 (18%) state that they are afraid of being judged if they sought help for substance use.

When asked the question, if given an option, where would you seek help?

- 1221 (38%) of respondents would seek help from a GP,
- 911 (28%) would seek help from a friend,
- 625 (19%) would seek help from an online source,
- 211 (7%) would not seek help,
- 182 (6%) would seek help from a 12-step group,
- 76 (2%) would seek help from a recovery community.

From these results we can form the impression that these respondents would not seek help from 'traditional', or 'recovery' community services. The survey indicates that a large number of respondents already know where to seek help for their drug use. However, conversely, a large number do not know where to go for help for their drug use. This indicates that the awareness of routes to accessing help with drug use could be improved out with specialist treatment settings.

## Respondents experiences and perceptions of Lockdown

- 1273 (28%) of respondents indicated that lockdown had no impact on the frequency of their use of drugs.
- 1178 (26%) indicated that their use had increased,
- 855 (19%) reported a reduction in use due to lockdown.

## Respondents perception of impact of lockdown on drug prices

- 2172 (48%) of respondents report that drug prices have stayed the same,
- 998 (22%) report that lockdown has increased the price of drugs,
- 81 (2%) report that drug prices have reduced as a result of lockdown.

## Respondents experiences of lockdown on frequency of use

A small number of respondents 598 (13%) report that drug availability has decreased and 646 (14%) report that drugs have become more available.

## Inferential statistics discussion

While the DAST-10 mean scores were relatively similar across all age range categories, there were significant differences between and within age groups. This may be explained by over representation of younger age cohorts in the survey. Similarly, these results may be explained by the reported use pattern of the younger age cohort. As discussed above the use of social media as a recruitment strategy may have impacted on the mean scores.

There were statistically significant differences between age group categories in relation to negative health consequences scores. This could suggest that age acts as a protective factor in relation to substance use problem severity, i.e. that younger people report higher rates of problem severity.

The DAST-10 mean scores were statistically different between male and female identity categories. This could be explained by the ratio of respondents from each gender or an indication of a valid representation of gendered drug patterns commonly reported in Scotland. NHS (ISD, 2020) report that a higher number of males than females present at specialist addiction service providers.

In calculating the mean of negative health consequences (using the 7-health question in the DAST-10) There were statistically significant differences between gender categories in relation to

negative health consequences scores. Men and non-binary genders scored higher than women. This may be explained by women traditionally having caring responsibilities within a household which may act as a protective factor in relation to problem severity.

The DAST-10 mean scores were statistically significant between employment categories. Respondents who were not employed or disabled had higher problem severity mean scores. This could suggest that employment or study act as protective factors in relation to substance use problem severity.

In calculating the mean of negative health consequences (using the 7-health question in the DAST-10) There were statistically significant differences between employment categories in relation to negative health consequences scores. Respondents who identified themselves as not employed or disabled had higher negative health consequences mean scores. This could suggest that employment acts as a protective factor in relation to substance use problem severity, i.e. that respondents in employment report lower rates of problem severity, however it should be noted that students reported high levels of problem severity.

The DAST-10 mean scores categorised by living situation were statistically significant. Respondents who reported living in unsuitable accommodation with other people, with friends, and in single person households all had high DAST -10 mean scores. This could suggest that a stable living situation acts as a protective factor in relation to substance use problem severity.

There were statistically significant differences between living situation categories. Although the differences of negative health consequences mean scores, the effect size was small.

The DAST-10 mean scores categorised by marital status were statistically significant. DAST 10 mean scores were higher for single people, compared to married or widowed respondents. This could suggest that a stable relationship acts as a protective factor in relation to substance use problem severity.

There were statistically significant differences between living situation categories in relation to negative health consequences mean scores. Negative health consequences mean scores for single person households were higher than households who had familial or relational protective factors.

# Recommendations/Conclusions

 The results indicate that 20% of respondent would know where to go for help with their substance use, and this is the case for the younger age cohort who report a high level of cocaine and cannabis use. In addition, over one fifth of all age groups report the use of medications not prescribed for them. • 38% of respondents would seek help from a GP in the first instance

These results suggest that there is a requirement for a targeted awareness raising education campaign on the availability for help for users that traditional services cannot and do not cater for, i.e. non users of opiates, benzodiazepines, and alcohol.

Around half of respondents would not let their employer known about any problems associated with their use of substances, and this indicates that there needs to be an education or a whole population approach to where and how to seek help for substance use that is perceived to be a problem. This would help reduce the stigma associated with help seeking being available (at present) only for the most sever PDU, i.e. those problem users in contact with services who inject drugs, and misuse benzodiazepines and alcohol.

# References

NHS (ISD) Prevalence of problem in Scotland, 2015-16 estimates, (March 2019) Information Services Division, NHS, Edinburgh.

NHS (ISD) Scottish Drug misuse database, overview of initial assessments for specialist drug treatment 2018-19, (March 2020), Edinburgh.

Public Health Scotland (June 2020), Prevalence of problem drug use in Scotland: 2015/16 estimates, a review of definitions and statistical methods, PHS, Edinburgh.

# Appendix 1::Inferential Statistics Results

#### **ANOVA calculations by DAST-10 score and Age**

A one way between groups analysis of variance was carried out to explore the relationship between age category and the mean DAST-10 problem severity scores. Participants were divided into seven age group categories. There was significant difference at the p value (0.000). Using the Welsh test F (6, 474)= 54.1, p=0.000). The difference in mean scores between age groups was medium. The effect size calculated used eta squared was 0.07. Post hoc comparisons using the Tukey HSD Test indicated that the DAST-10 mean scores between age groups were significantly different.

#### **Age Category**

The DAST-10 mean score was statistically significant in the 18-24 age group (4.3, SD=2.4, p=0.000), 45-54 age group (3.6, SD=2.4, p=0.000), 65-74 age group (1.5, SD=1.9, p=0.000), and the 75 years plus age group (2.5, SD=2.6). The DAST-10 mean score was statistically significant in the 25-34 age group (4.4, SD=2.6, p=0.000), the 45-54 age group (3.6, SD=2.8, p=0.000), 55-64 age group (1.5, SD=1.9, p=0.000), and the 75 plus age group (2.5, SD=2.6, p=0.000)

The DAST-10 mean score was statistically significant in the 35-44 age group (4.4, SD=2.7, p=0.0000), 45-54 age group (3.6, SD=2.8, p=0.000), 55-64 age group (1.5, SD=1.9, p=0.0000), 65-74 age group (1.5, SD=1.9, p=0.000), and the 75 plus age group (2.5, SD 2.6, p=0.000)

#### Gender

A one way between groups analysis of variance was conducted to explore the influence of gender on DAST-10 problem severity scores. Participants were categorised by the gender category they identified with. There was a significant difference at the p value (0.05) between groups. F (5, 4455)= 23.332, p = 0.0000). Despite statistical significance, the actual difference in mean scores between the two groups were small, and this is confirmed by the effect size (0.02) calculated using eta squared.

Post Hoc comparisons using the Tukey HSD test indicated that the DAST-10 mean scores for men  $(4.4, \, \text{SD=}2.6 \, , \, \text{p=} \, 0.000)$  were significantly different from women  $(3.5, \, \text{SD=} \, 2.6, \, \text{p=}0.000)$ . This confirms that gender is an important variable in the reported DAST-10 problem severity means scores. Similarly, DAST-10 scores for women were significantly different from people who identified themselves as non-binary  $(4.7, \, \text{SD=} 3.0, \, \text{p=}0.005)$ .

#### **Employment**

A one way between groups analysis of variance was carried out to explore the impact of employment on DAST-10 scores. There were significant differences between groups F (4, 4452) =64.6, (p =0.000). The statistical significance the difference in mean scores is medium. The effect

size calculated using eta squared was 0.05. Post hoc comparisons were conducted using the Tukey HSD test indicated that the mean score were significantly different in employment status. The DAST-10 mean scores were significantly different between students (4.0, SD=2.4, p=0.000), retired participants (1.8, SD=2.1, p=0.000), and disabled people (5, SD 3.0, p=0.0000)

The DAST-10 mean scores were significantly different between retired participants (1.8, SD=2.1, p=0.000), participants who are not employed (4.8, SD=2.8, p=0.000), participants who are employed (4.0, SD=2.5, p=0.0000) and disabled participants (5.0, SD=3.0, p=0.000)The DAST-10 mean scores were significantly different between participants who were not employed (4.8, SD=2.8, p=0.000), and those who are employed (4.0, SD=2.5, p=0.0000). The DAST-10 mean scores were significantly different between participants who are employed (4.0, SD=2.5, p=0.0000) and disabled participants (5.0, SD=3.0, p=0.000).

#### **Living Situation**

A one way between groups analysis of variance was carried out to explore the impact of living situation on the DAST-10 scores. Respondents were divided into reported living situation category. There were significant differences between groups F (8, 4449) =9.2, (p =0.000). Despite reaching statistical significance, the actual difference in mean scores between the groups was small. The effect size calculated using eta squared was 0.02. Post Hoc comparisons using the Tukey HSD test indicated that the DAST-10 mean scores were statistically significantly different in living situation.

The DAST-10 mean scores were significantly different between participants living with a partner (3.6, SD=2.6, p=0.0000), other household (4.8, SD=2.8, p=0.000), participants staying with friends (4.3, SD=2.4, p0.0000) single person households (4.2, SD=2.9, p=0.000).

#### **Marital Status**

A one way between groups analysis of variance was carried out to explore the impact of living situation on the DAST-10 scores. Participants were divided into the marital status they identified with. There were significant differences between groups F (3, 46.5, p=0.000). Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small. The effect size calculated using eta squared was 0.03.

Post Hoc comparisons using the Tukey HSD test indicated that the DAST-10 mean scores were statistically significantly different. The DAST-10 mean scores were significantly different between participants who were widowed (2.7, SD=2.7, p0.000), single (4.4, SD=2.5, p,0.000), and married or with a partner (3.6, SD=2.6, p=0.000). The DAST-10 mean scores were significantly different between participants who were single (4.4, SD=2.5, p,0.000), and those who were married or with a partner (3.6, SD=2.6, p=0.000), and divorced or separated (3.2, SD=2.8, p=0.0000).

# DAST-10 mean scores analysis of negative health consequences of substance use

All health-related question data in the survey were grouped together to enable us to conduct the same inferential statistical tests above. The scores were added together with a mean score of 7. (there were 7 health related questions in the DAST-10). 7 being the highest problem severity score using health question answers.

#### Age

A one way between groups analysis of variance was carried out to explore the impact of age group on the (negative health consequence mean score). Participants were divided into the age category they identified with. There were significant differences between age groups. F(6, 4424)=40.5, p=0.000). Despite reaching statistical significance, the actual difference in mean scores between the groups had a medium effect size. The effect size using eta squared was 0.05. Post Hoc comparisons using the Tukey HSD test indicated that the Negative health consequences mean scores mean scores were statistically significantly different. he negative health consequences mean scores mean scores between age group were significantly different between the 18-24 age group(3, SD=1.7, p=0.045), 35-44 age group (32.6,SD=2.0, p=0.045), 55-64 age group (1.9,SD=2.0, p=0.0.000), and the 75 plus age group (1.9,SD=1.8, p=0.000).

The negative health consequences mean scores between age groups were significantly different between the 25-34 age group (3.2, SD=1.9, p=0.0.002) and the 45-54 age group (2.7, SD=2.0, p=0.002), 55 to 64 age group (1.9, SD=2.0, p=0.000), the 65-74 age group (1.3, SD=1.6, p=0.000), and the 75 plus age group (1.9, SD=1.8, p=0.000). The negative health consequences mean scores between age groups were significantly different between the 35-44 age group, (3.2, SD=1.9,p=0.006), 45-54 age group (2.7, SD=2.0, p0.006), 55-64 age group (1.9, SD2.0, p=0.000), 65-74 age group 1.3, SD=1.6, p=0.000), and the 75 plus age group (1.9, SD=1.8, p=0.000).

The negative health consequences mean scores between age groups were significantly different between the 45-54 age group (2.7, SD=2.0, p0.006), 55-64 age group(1.9, SD2.0, p=0.000), and the 65-74 age group (1.3, SD=1.6, p=0.000). The negative health consequences mean scores between age groups were significantly different between the 55-64 age group (1.9, SD2.0, p=0.000), and the 65-74 age group (1.3, SD=1.6, p=0.037).

#### Gender

A one way between groups analysis of variance was carried out to explore the impact of gender category on the (negative health consequences mean scores). Participants were divided into the gender category they identified themselves with. There were significant difference at the p=0.05 level in negative health consequences mean scores for the different gender categories. F(5, 4455, =11.375, p=0.000). Despite reaching statistical significance, the actual difference in mean scores between the groups had a small effect size. The effect size using eta squared was 0.01. Post Hoc comparisons using the Tukey HSD test indicated that the negative health consequences mean scores were statistically significantly different. The negative health consequences mean scores

between gender categories were significantly different between men (3.1, SD=1.8, p=0.000), and women, (2.6, SD=1.9, p=0.000),

The negative health consequences mean scores between gender categories were significantly different between women (2.6, SD=1.9, p=0.000), and non-binary gender (3.4, SD=2.1, p=0.022).

#### **Employment**

A one way between groups analysis of variance was carried out to explore the impact of employment on the (negative health consequences mean scores). Participants were divided into the employment status they identified themselves with. There were significant difference at the p=0.05 level in negative health consequences mean scores for the different employment categories. F(4,4452, =55.326, p=0.000). Despite reaching statistical significance, the actual difference in mean scores between the groups had a small effect size. The effect size using eta squared was 0.04. Post Hoc comparisons using the Tukey HSD test indicated that the Negative health consequences mean scores were statistically significantly different.

The negative health consequences mean scores between employment categories were significantly different between students (2.9, SD=1.7, p=0.000) retired participants, (1.5, SD=1.7, p=0.000) people who are not employed (3.4, SD=2.0, p=0.000), and disabled participants (3.7, SD=2.1, p=0.000).

The negative health consequences mean scores between employment categories were significantly different between retired participants (1.5, SD=1.7, p=0.000) and not employed (3.4, SD=2.0, p=0.000), and disabled participants (3.7, SD=2.1, p=0.000). The negative health consequences mean scores between employment categories were significantly different between those not employed (3.4, SD=2.0, p=0.000), and employed 2.9, SD=1.8, p=0.000).

#### **Living Situation**

A one way between groups analysis of variance was carried out to explore the impact of employment on the (negative health consequences mean scores). Participants were divided into the living situation status they identified themselves with. There were significant difference at the p=0.05 level in negative health consequences mean scores for the different living situation categories F(8,4449,=6.302,p=0.000). Despite reaching statistical significance, the actual difference in mean scores between the groups had a small effect size. The effect size using eta squared was 0.01.

Post Hoc comparisons using the Tukey HSD test indicated that the Negative health consequences mean scores were statistically significantly different. The negative health consequences mean scores between living situation was significantly different between people living with their partner (2.7, SD=1.9, p=0.000), people staying with their parents (3.0, SD1.8, p=0.001), those living alone (3.1, SD=2.0, p=0.000).

#### **Marital Status**

A one way between groups analysis of variance was carried out to explore the impact of marital status on the (negative health consequences mean scores). Participants were divided into the

marital status they identified themselves with. There were significant difference at the p=0.05 level in negative health consequences mean scores for the different marital status categories F(3,4459, =38.983, p=0.015). Despite reaching statistical significance, the actual difference in mean scores between the groups had a small effect size. The effect size using eta squared was 0.02. Post Hoc comparisons using the Tukey HSD test indicated that the negative health consequences mean scores were statistically significantly different. The negative health consequences mean scores between marital status groups were significantly different between widowed participants (2.0, SD=2.0, p=0.000), single people(3.1, SD=1.8, p=0.000). The negative health consequences mean scores between marital status groups were significantly different between single people(3.1, SD=1.8, p=0.000) and married or with a partner (2.6, SD=1.8, p=0.000) divorced or separated (2.4, SD=2.0,p=0.000).

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