

The Indirect Impacts of the COVID-19 Pandemic on Individuals Living in the Nipissing and Parry Sound Districts: A Focus on Substance Use

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In January and February 2021, the North Bay Parry Sound District Health Unit surveyed individuals, aged 16 and older, living in Nipissing and Parry Sound districts to learn about the indirect impacts of the COVID-19 pandemic. Participants were asked about their experiences since the start of the COVID-19 pandemic (March 2020). Survey questions were related to mental health and well-being, physical health, substance use, access to programs/services, child well-being, parental concerns, income, and access to basic needs. During the survey's collection period, the Nipissing and Parry Sound districts were under a Stay-at-Home Order, and schools were closed for a portion of the survey collection period (January 5th to February 8th, 2021).

Overall, 1629 individuals responded to the survey. Nearly one-third (30%) of respondents reported an increase in alcohol use since the start of the COVID-19 pandemic, while 14% reported an increase in cannabis use and 11% reported an increase in nicotine use since the start of the pandemic.

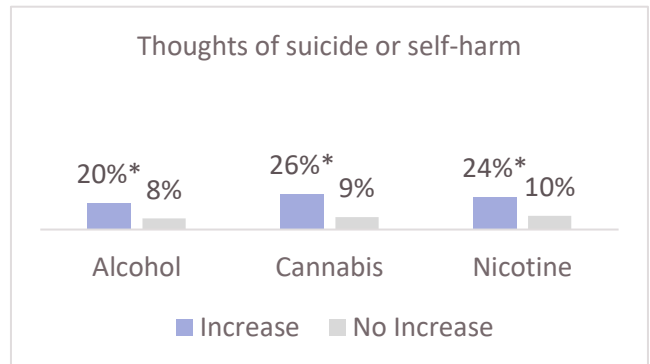
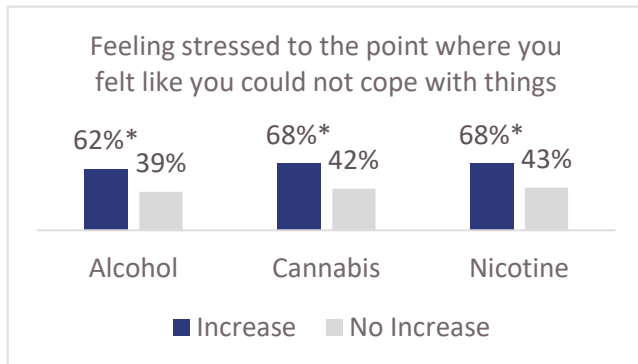
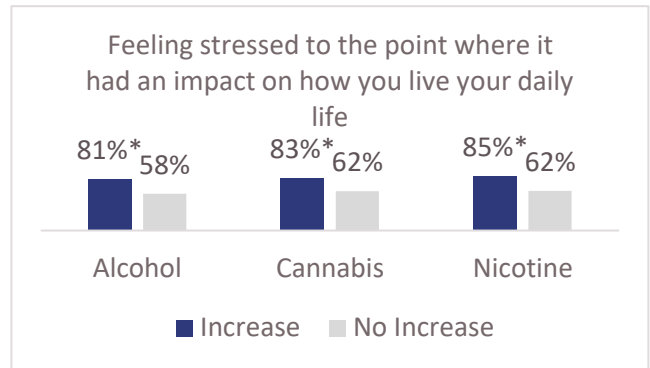
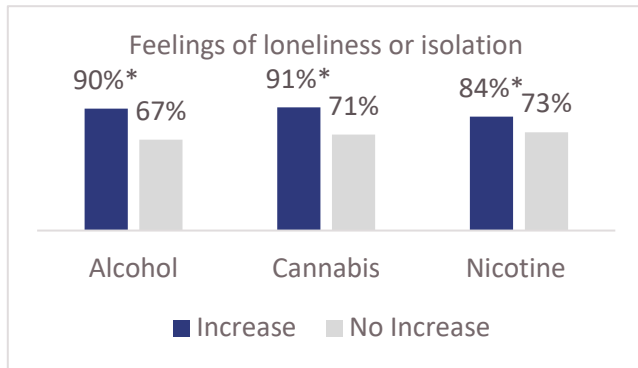
Of those who reported an increase in alcohol, cannabis, and/or nicotine use since the start of the pandemic, 79% identified as female and 68% indicated they lived in the Nipissing district, which is consistent with respondents who did not report an increase in alcohol, cannabis, or nicotine use.

This report outlines key findings specific to individuals living in the Nipissing and Parry Sound districts who reported an increase in alcohol, cannabis, and/or nicotine use since the start of the COVID-19 pandemic. Descriptive statistics of demographic traits, as well as frequency tables detailing supplementary information, can be found in the appendix (Tables 1-8).

Please note, data collected from the community survey may be subject to various survey biases, including social desirability bias (i.e., respondents may give an answer that they believe is socially acceptable), response bias (i.e., certain groups of people are more likely to complete a survey than others) and recall bias (i.e., misremembering events or information to accurately answer a question). Additionally, individuals without internet access were excluded from the sampling frame.

FINDING #1: Respondents who indicated an increase in alcohol, cannabis and/or nicotine reported worse mental health and well-being outcomes compared to those without an increase in their substance use.

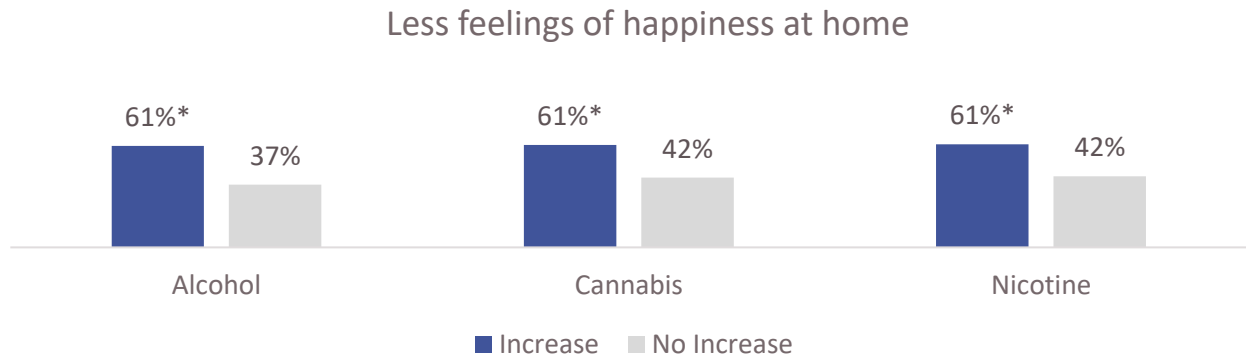
Most respondents who indicated an increase in alcohol, cannabis, and/or nicotine use since the start of the COVID-19 pandemic reported experiencing **feelings of loneliness or isolation** and **feelings of stress**. Rates of loneliness and isolation, as well as stress and **thoughts of suicide or self-harm** for respondents indicating an increase in alcohol, cannabis, and/or nicotine use were **significantly higher¹** than respondents who did not indicate an increase in these substances.



* Indicates the difference is statistically significant.

¹ The term “significant” is used within this report to describe statistically meaningful differences between respondents who reported an increase in substances and respondents who did not. Without statistical significance, we cannot say with certainty that the differences are real, or simply due to chance. Sampling variability associated with each estimate is determined using 95% confidence intervals (95% CI), which indicate the precision of the estimate. Confidence intervals were used to determine significant differences between estimates.

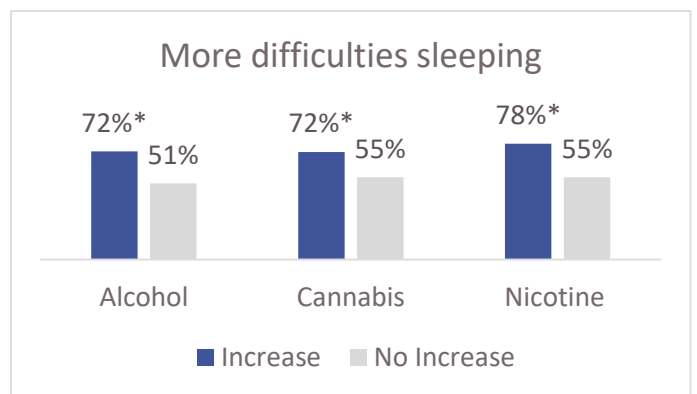
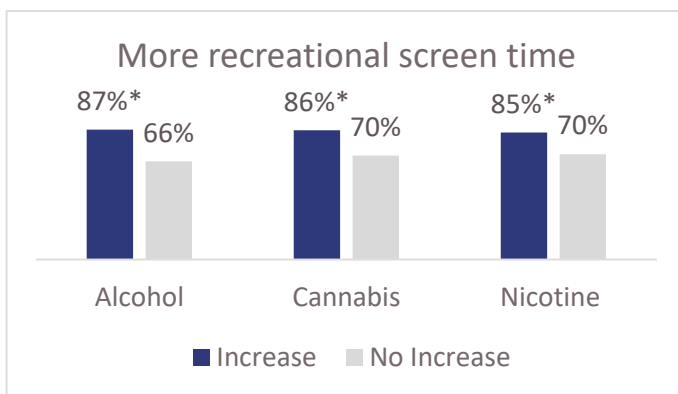
Approximately **two-thirds** of respondents who indicated an increase in alcohol, cannabis, and/or nicotine use since the start of the COVID-19 pandemic reported feeling **happiness at home less often** since the start of the pandemic. Low levels of happiness at home were **significantly more likely** among respondents who indicated an increase in substance use.



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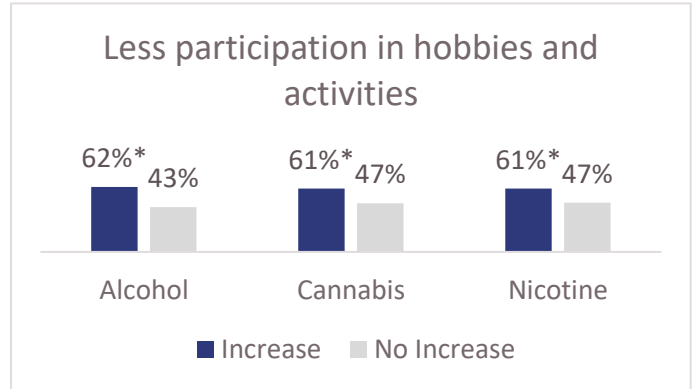
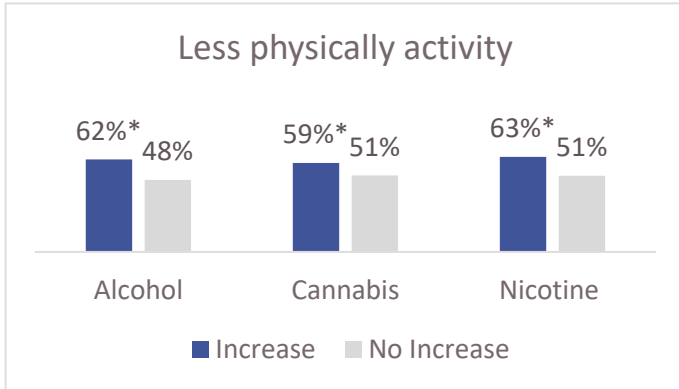
FINDING #2: Respondents who indicated an increase in substance use were more likely to report increases in screen time, more difficulties sleeping, and less time spent participating in physical activity and hobbies.

Over **eighty-five percent** of respondents who indicated an increase in substance use since the start of the COVID-19 pandemic reported engaging in **more daily recreational screen time**, while approximately **three-quarters** of respondents reported **more difficulties sleeping**. Increased screen time and difficulties sleeping were **significantly higher** for respondents indicating an increase in alcohol, cannabis, and/or nicotine.



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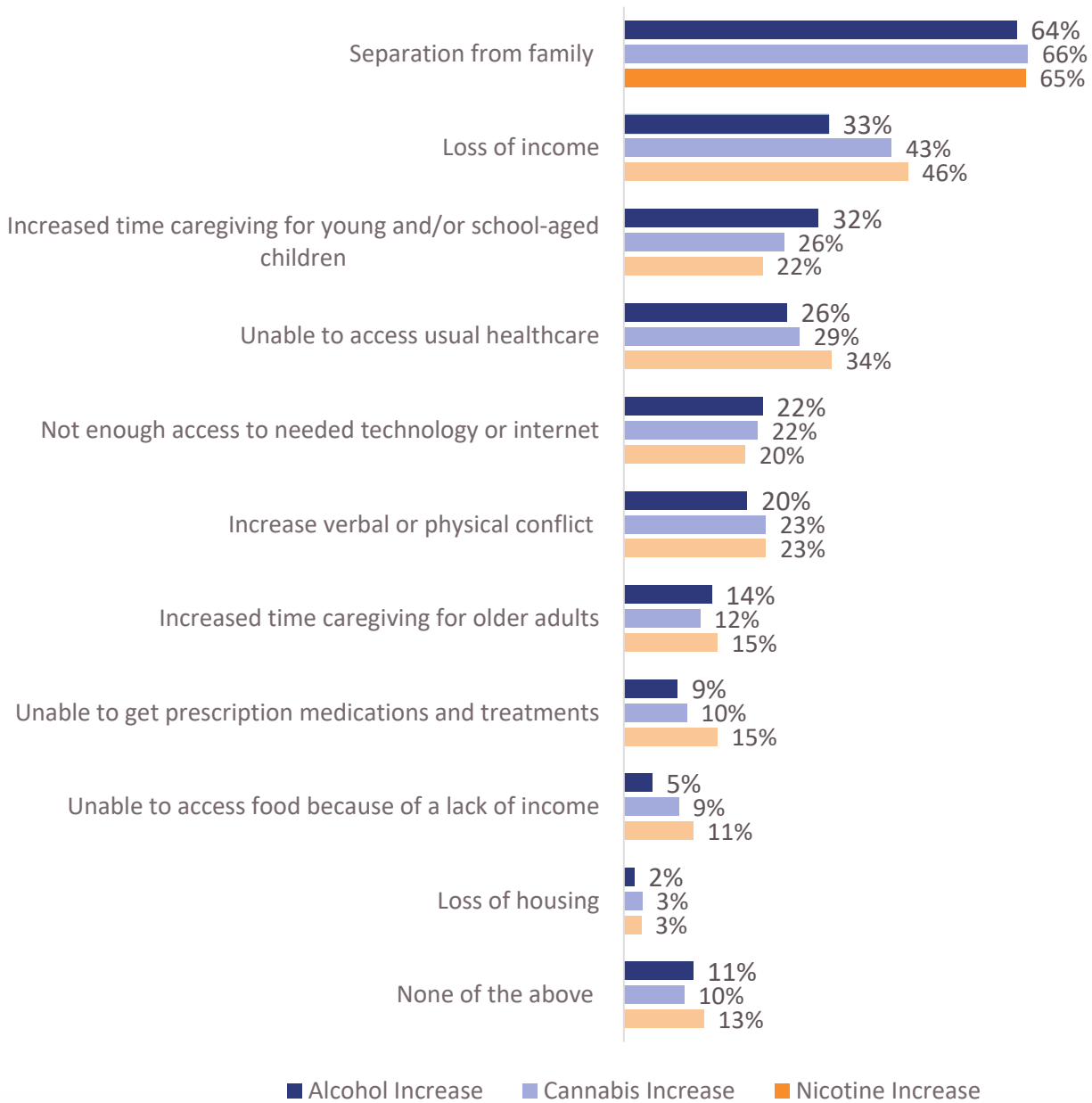
Three out of five respondents who indicated an increase in substance use since the start of the COVID-19 pandemic also reported participating in **less physical activity** and **hobbies** since the start of the pandemic. Decreased participation in physical activity and hobbies were **significantly more likely** among those indicating an increase in substances.



* Indicates the difference is statistically significant.

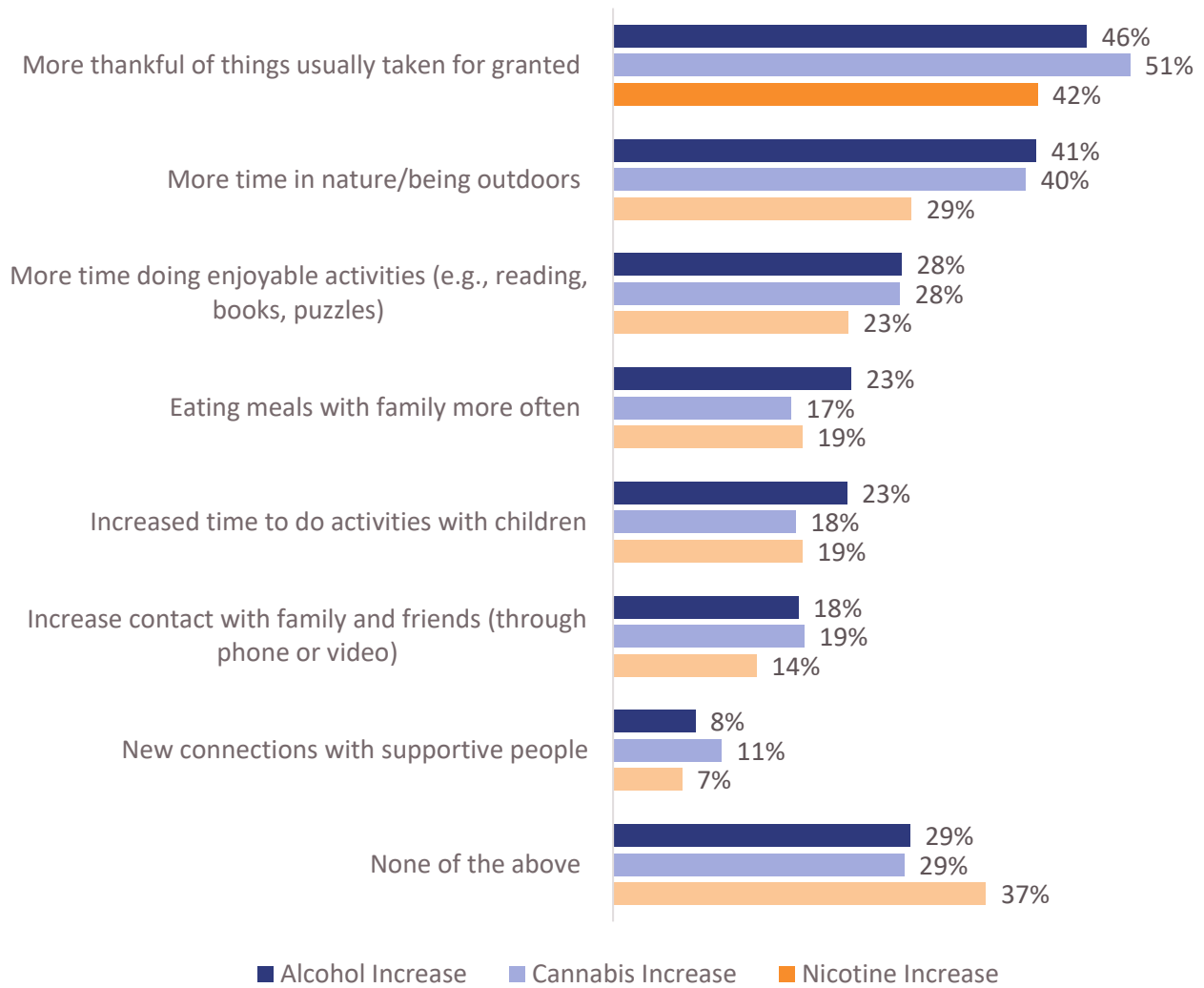
FINDING #3: The survey asked about negative experiences arising from the COVID-19 pandemic. Respondents indicated a number of negative experiences resulting from the pandemic.

The most reported issue arising from the pandemic reported by respondents who indicated an increase in alcohol, cannabis, and/or nicotine use since the start of the COVID-19 pandemic was **separation from family**, which is consistent with respondents who did not report an increase in these substances. Rates of all negative experiences except housing loss were **significantly higher** for respondents who indicated an increase in alcohol, cannabis, and/or nicotine use since the start of the COVID-19 pandemic compared to those who did not report an increase in these substances.



FINDING #4: The survey asked about positive experiences arising from the COVID-19 pandemic. A greater percentage of respondents reported no positive outcomes from the pandemic compared to the percentage of respondents who reported no negative outcomes.

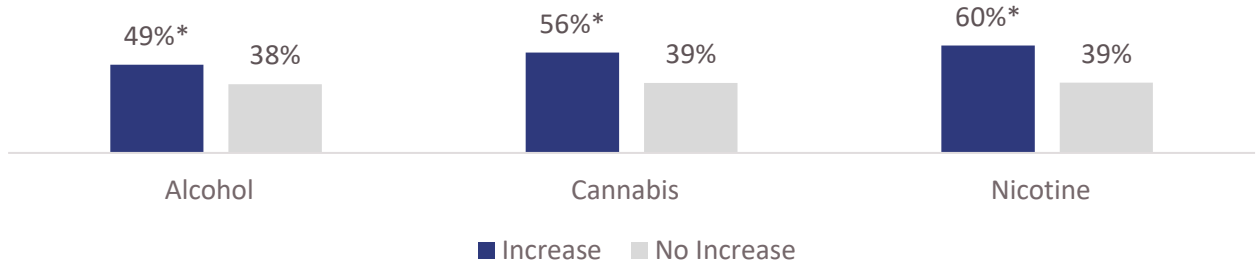
The most reported positive experience arising from the pandemic reported by respondents who indicated an increase in substance use since the start of the COVID-19 pandemic was feeling **more thankful of things usually taken for granted**, which is consistent with respondents who did not report an increase in these substances.



Rates of **more time doing enjoyable activities**, and **increased contact with family and friends** were consistently **significantly lower** for respondents who indicated an increase in substance use compared to those who did not.

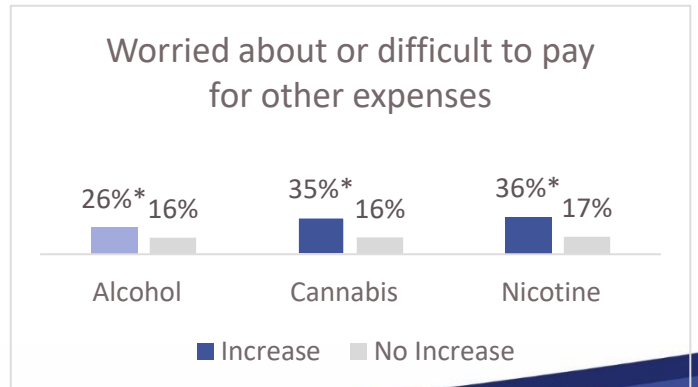
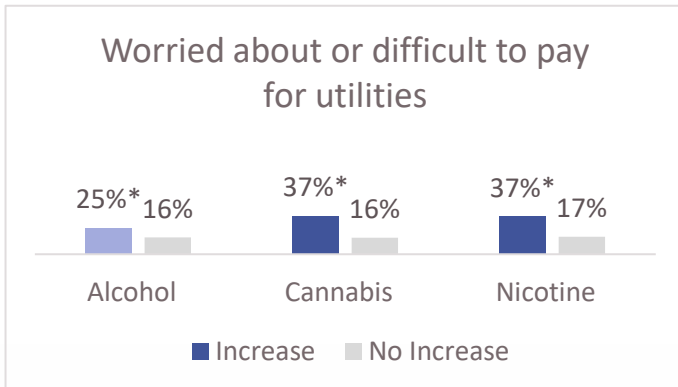
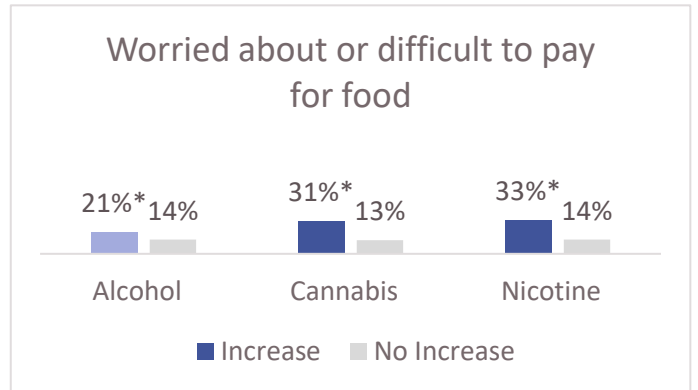
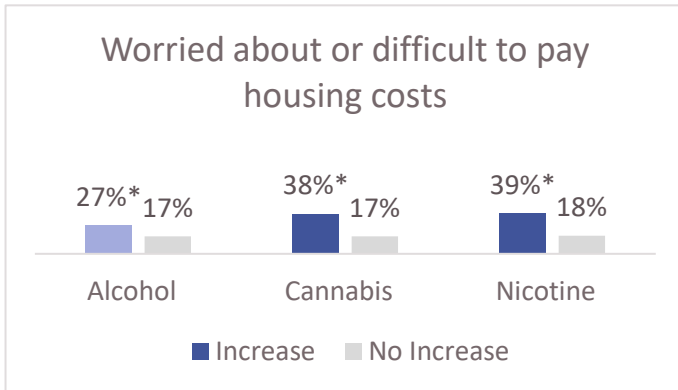
FINDING #5: Financial concerns were more frequently reported among respondents who indicated an increase in substance use.

All respondents, regardless of substance use patterns, worried most about **putting money into savings**; however, respondents who indicated increases in substance use were significantly more likely to report difficulties putting money into savings.



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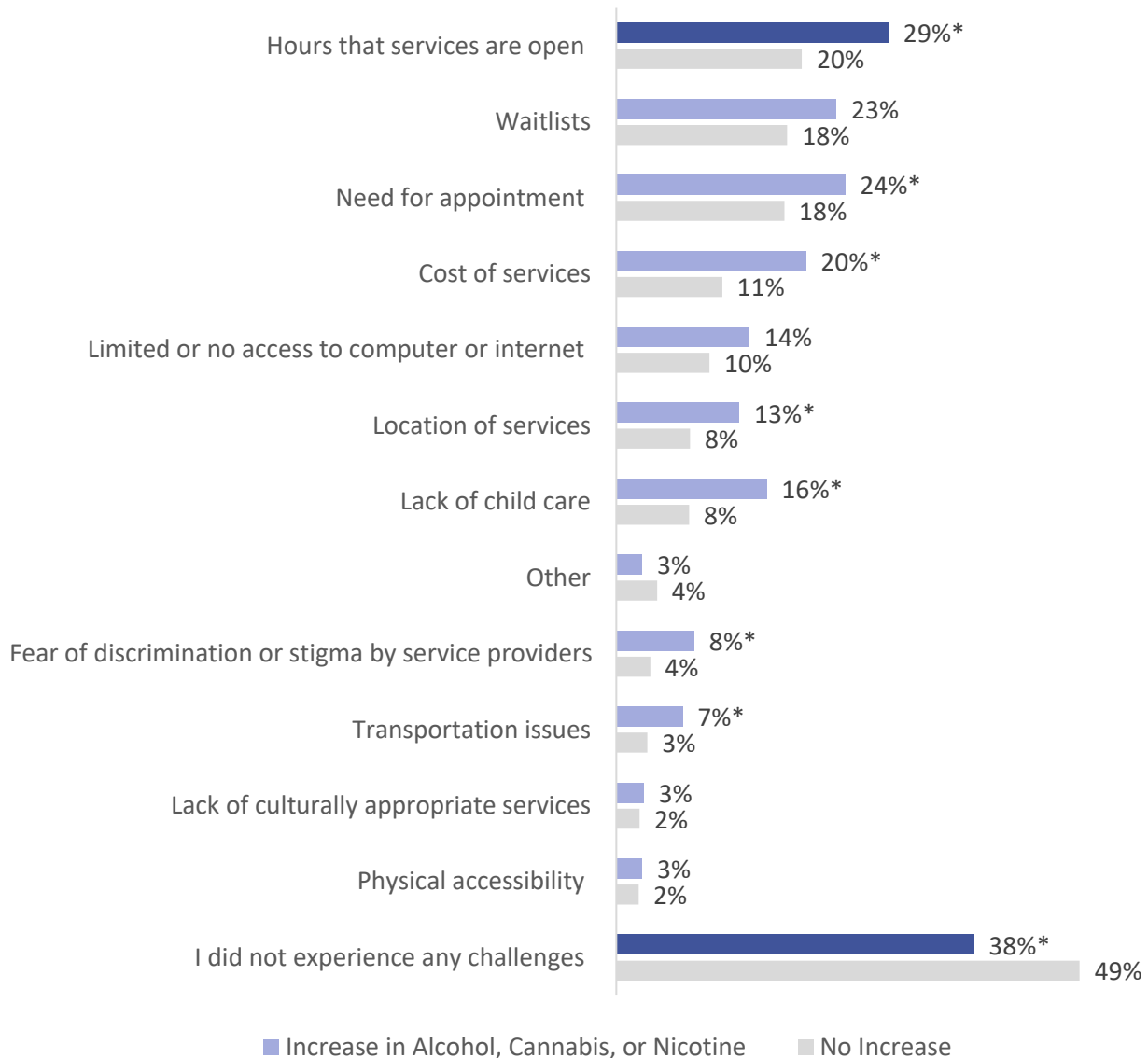
Rates of worrying about or difficulty paying for basic needs were **significantly higher** for respondents who indicated an increase in alcohol, cannabis, and/or nicotine than those who did not report an increase in these substances. Considering substance type, rates of worrying about or difficulty paying for basic needs were **higher** for respondents who reported an increase in **cannabis** and/or **nicotine** compared to alcohol.



* Indicates the difference is statistically significant.

FINDING #6: Respondents who reported increases in substance use were more likely to report challenges when access supports and services.

The most frequently reported challenge indicated by respondents who reported an increase in alcohol, cannabis, and/or nicotine² was the **hours that services are open**, which is consistent with respondents who did not report an increase in any of these substances. Overall, rates of challenges accessing resources were **significantly higher** for respondents who indicated an increase in alcohol, cannabis, or nicotine compared to those who did not report an increase in any of these substances.

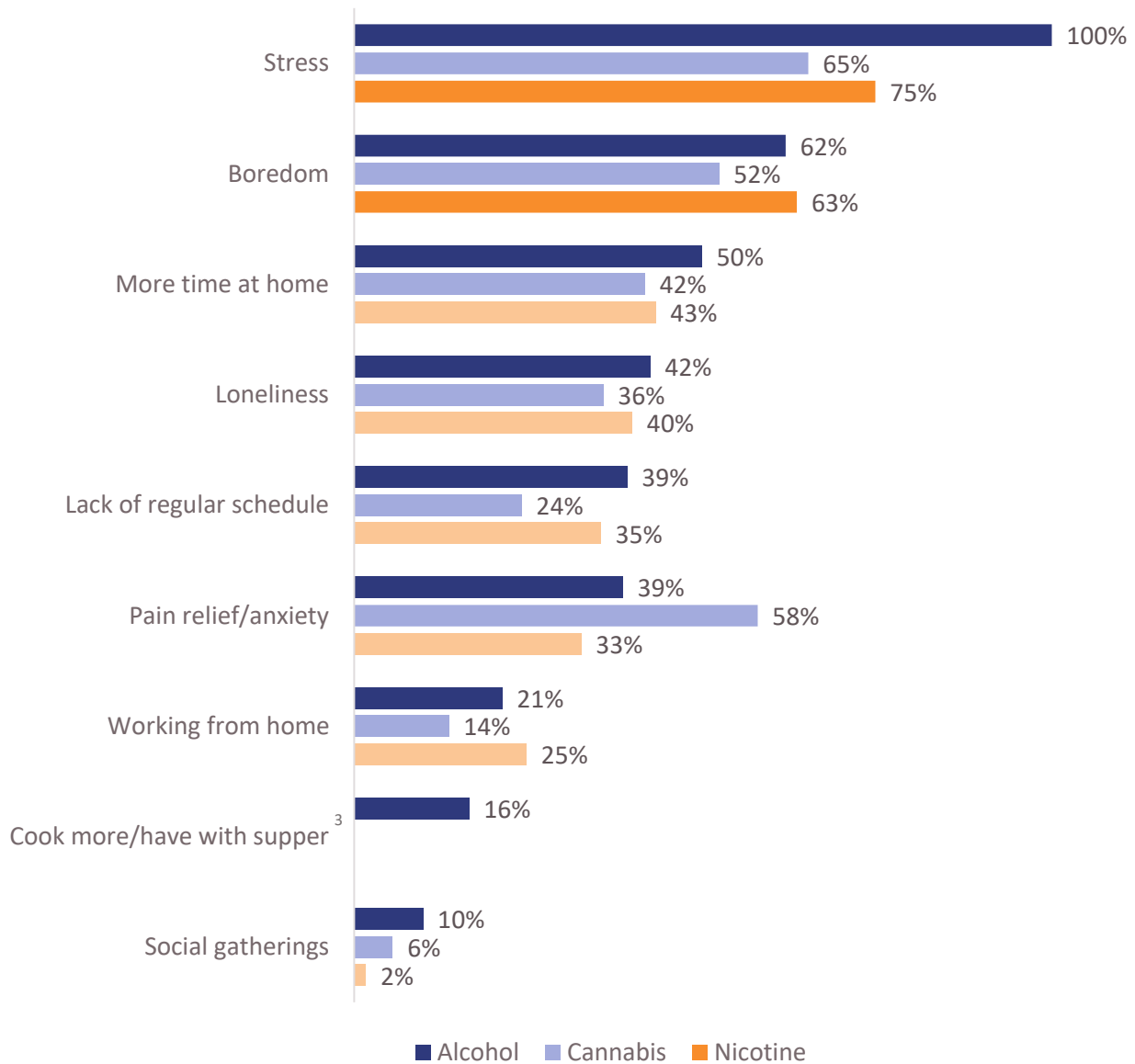


* Indicates the difference is statistically significant.

² Challenges accessing resources were analyzed based on whether an individual reported an increase in any of the three substances (i.e., alcohol, cannabis, or nicotine).

FINDING #7: Stress was indicated as the most commonly reported reason for substance use increases.

Regardless of substance type, **stress** was most frequently selected as the reason for the increase in alcohol, cannabis, and nicotine use. Boredom was the second most frequently selected reason for the increase in alcohol and nicotine; however, pain relief/anxiety was the second most frequently selected reason for the increase in cannabis use.



³ Cook more/have with supper was not a response option for those who reported an increase in cannabis or nicotine.

Appendix

Table 1

Characteristics of Respondents reporting an Increase in Alcohol, Cannabis, and/or Nicotine Use since the Start of the COVID-19 Pandemic

Variable	Alcohol Increase	Cannabis Increase	Nicotine Increase
	(n = 485) %	(n = 235) %	(n = 178) %
Gender			
Female	76.45	80.80	79.39
Male	23.13	18.75	20.15
Non-binary	0.21	0.00	0.33
Transgender	0.21	0.45	0.07
Two-spirit	0.00	0.00	0.07
Age group			
16 to 24 years	2.47	6.81	4.49
25 to 34 years	21.86	26.81	14.61
35 to 44 years	34.23	34.47	37.08
45 to 54 years	23.09	20.85	24.72
55 to 64 years	12.37	8.51	14.61
65 to 74 years	5.98	2.55	4.49
75 to 84 years	0.00	0.00	0.00
85 years and older	0.00	0.00	0.00
Parent/Guardian			
Yes	47.72	41.63	45.45
No	52.28	58.37	54.55
District			
Nipissing	67.63	73.19	65.17
Parry Sound	32.37	26.81	34.83
COVID-19 Government Financial Assistance			
Yes	29.48	35.74	37.64
No	66.80	60.43	55.06
Prefer not to answer	3.71	3.83	37.64

Note. Government financial assistance includes CERB, CESB, EI, rent/mortgage or other payment deferrals (e.g. utilities, credit card balance) from the beginning of the COVID-19 pandemic to the time of the survey.

Table 2

Frequency of Respondents who reported an increase in the following behaviours since the start of the COVID-19 Pandemic (n = 1629)

Behaviour	n	%
Alcohol use	485	29.77
Cannabis use	235	14.43
Nicotine use, including smoking and vaping	178	20.93

Note. Participants were requested to select all that apply. n = number of participants.

Table 3

Level of Agreement of the Changes Experienced by Respondents who reported an Increase in Alcohol, Cannabis, and/or Nicotine use since the Start of the COVID-19 Pandemic

Variable	Alcohol %	Cannabis %	Nicotine %
Feelings of loneliness or isolation			
Much more often	49.06	52.77	51.41
Somewhat more often	41.13	38.30	32.77
About the same	5.64	6.38	9.04
Somewhat less often	1.46	0.85	1.69
Much less often	0.42	0.43	1.13
Doesn't apply to me	2.30	1.28	3.95
Amount of daily recreational screen time/ online gaming			
Much more often	56.82	57.26	57.87
Somewhat more often	29.96	29.06	26.97
About the same	8.88	8.97	9.55
Somewhat less often	1.03	1.71	0.56
Much less often	1.03	1.28	1.12
Doesn't apply to me	2.27	1.71	3.93
Difficulties sleeping			
Much more often	35.54	38.46	40.45
Somewhat more often	36.78	33.33	37.08
About the same	20.66	20.94	14.61
Somewhat less often	1.03	0.85	2.25
Much less often	1.86	3.42	2.25
Doesn't apply to me	4.13	2.99	3.37
Being physically active			
Much more often	11.16	11.11	7.43
Somewhat more often	11.36	11.11	9.71
About the same	15.29	18.38	18.29
Somewhat less often	19.63	18.80	16.57
Much less often	42.15	40.60	46.86
Doesn't apply to me	0.41	0.00	1.14
Feeling stressed to the point where it had an impact on how you live your daily life			
Much more often	39.79	47.23	50.85
Somewhat more often	41.65	35.32	34.46
About the same	10.52	9.36	10.17
Somewhat less often	2.68	2.55	1.69
Much less often	1.03	1.28	0.56
Doesn't apply to me	4.33	4.26	2.26

Table 3, continued

Feeling stressed to the point where you felt like you could not cope/deal with things			
Much more often	24.95	31.62	31.25
Somewhat more often	37.01	35.90	36.36
About the same	17.05	13.25	17.61
Somewhat less often	3.74	5.56	1.70
Much less often	1.46	2.56	2.27
Doesn't apply to me	15.80	11.11	10.80
Thoughts of suicide or self-harm			
Much more often	7.73	12.04	8.54
Somewhat more often	12.23	14.35	15.85
About the same	13.30	9.26	12.20
Somewhat less often	0.86	1.85	1.83
Much less often	0.86	0.93	0.61
Doesn't apply to me	65.02	61.57	60.98
Ability to manage problems or stressful situations			
Much more often	7.47	9.05	12.00
Somewhat more often	17.43	15.95	20.00
About the same	36.93	32.76	32.57
Somewhat less often	18.05	18.53	16.00
Much less often	18.26	21.55	16.00
Doesn't apply to me	1.87	2.16	3.43
Stigma or worry about stigma because of your mental health			
Much more often	17.86	22.61	21.84
Somewhat more often	24.37	26.09	21.26
About the same	31.51	30.43	25.86
Somewhat less often	1.68	2.61	2.30
Much less often	0.63	3.04	1.72
Doesn't apply to me	23.95	15.22	27.01
Participating in hobbies and activities (sports, reading, music, arts, etc.)			
Much more often	7.42	7.66	9.09
Somewhat more often	15.05	17.45	13.07
About the same	13.81	13.62	16.48
Somewhat less often	15.88	13.19	13.64
Much less often	46.60	47.66	47.16
Doesn't apply to me	1.24	0.43	0.57
Feelings of happiness at home			
Much more often	4.13	7.30	4.60
Somewhat more often	8.47	9.87	12.07
About the same	26.65	21.46	20.69
Somewhat less often	27.48	23.61	27.01
Much less often	33.06	37.34	34.48
Doesn't apply to me	0.21	0.43	1.15

Table 4

Frequency of Negative Impacts as a result of the COVID-19 Pandemic indicated by Respondents who Reported an Increase in Alcohol, Cannabis, and/or Nicotine since the Start of the Pandemic

Negative Impact	Alcohol	Cannabis	Nicotine
	%	%	%
Loss of income	33.20	43.40	46.07
Loss of housing	1.65	2.98	2.81
Unable to access food because of a lack of income	4.54	8.94	11.24
Unable to access usual healthcare	26.39	28.51	33.71
Unable to get prescription medications and treatments	8.66	10.21	15.17
Not enough access to needed technology or internet	22.47	21.70	19.66
Increase verbal or physical conflict	20.00	22.98	23.03
Separation from family	63.71	65.53	65.17
Increased time caregiving for young and/or school-aged children	31.55	25.96	22.47
Increased time caregiving for older adults	14.23	12.34	15.17
None of the above	11.24	9.79	12.99

Table 5

Frequency of Positive Impacts as a result of the COVID-19 Pandemic indicated by Respondents who Reported an Increase in Alcohol, Cannabis, and/or Nicotine since the Start of the Pandemic

Positive Impact	Alcohol	Cannabis	Nicotine
	%	%	%
New connections with supportive people	8.04	10.64	6.74
Increased time to do activities with children	22.89	17.87	18.54
Eating meals with family more often	23.30	17.45	18.54
More time in nature/being outdoors	41.44	40.43	29.21
More time doing enjoyable activities (e.g., reading, books, puzzles)	28.25	28.09	23.03
More thankful of things usually taken for granted	46.39	50.64	41.57
Increase contact with family and friends (through phone or video)	18.14	18.72	14.04
None of the above	29.07	28.51	36.52

Table 6

Frequency of Worries or Difficulties during the Previous Month Experienced by Respondents Reporting an Increase in Alcohol, Cannabis, or Nicotine Use since the Start of the COVID-19 Pandemic

Variable	Alcohol	Cannabis	Nicotine
	%	%	%
Pay your housing costs	27.22	38.30	38.76
Pay for food	21.03	31.49	32.58
Pay for utilities	25.36	37.02	36.52
Pay other expenses	25.77	35.32	35.96
Put money into savings or other investments	48.87	55.74	59.55

Table 7

Reason for Increase in Alcohol, Cannabis, and Nicotine Use since the Start of the COVID-19 Pandemic

Reason	Alcohol	Cannabis	Nicotine
	%	%	%
Lack of regular schedule	39.18	24.04	35.39
Working from home	21.24	13.62	24.72
Boredom	61.86	52.34	63.48
Stress	100.00	65.11	74.72
Loneliness	42.47	35.74	39.89
No reason	0.21	0.85	1.12
More time at home	49.90	41.70	43.26
Cook more/have with supper ^a	16.49	-	-
Pain relief/anxiety	38.56	57.87	32.58
Social gatherings	9.90	5.53	1.69
Legal age now	0.21	-	-
Unsure	3.71	0.85	3.93

Note. Only respondents who indicated an increase in the behaviour were given the option to indicate the reason(s) for the increase. As such, percentages are based on the number of participants who indicated an increase in the behaviour.

^a The reasons “cook more/have with supper” and “legal age now” were not response options for those who reported an increase in cannabis or nicotine.

Table 8

Frequency of Respondents who Reported an Increase in Alcohol, Cannabis, or Nicotine use Indicating they Experienced the following Challenges when Accessing Resources or Supports to Improve their Health and Well-being (n = 654)

Challenge Experienced	%
Limited or no access to computer or internet	14.07
Location of services	13.00
Transportation issues	7.03
Cost of services	20.03
Hours that services are open	28.75
Need for appointment	24.16
Lack of child care	15.90
Lack of culturally appropriate services	2.91
Fear of discrimination or stigma by service providers	8.26
Physical accessibility	2.75
Waitlists	23.24
Other	2.75
I did not experience any challenges	37.77

Note. Participants were requested to select all that apply.