

Brief Screener for Behavioural Addictions: User's Guide

January 2017

Purpose

The Brief Screener for Behavioural Addiction is designed to identify individuals who have had excessive involvement in past year in any of ten behaviours to the extent that involvement is causing significant problems.

Behaviours Assessed

- Alcohol
- Tobacco
- Marijuana
- Cocaine
- Gambling
- Over Working
- Over Eating
- Sex
- Video gaming
- Shopping

Notable Features

- The BSBA items were derived from lay public perceptions of indicators of excessive involvement in 10 different behaviours
- Each behaviour is assessed using 4 self-report items that represent the four most common domains of problems identified by individuals suffering the problem, individuals who know someone personally with that problem and member of the public without any personal involvement.
- The BSBA had been shown to be reliable and valid for use in general population samples. Further validation for use in clinical samples is in progress

Administration and Scoring

The scale is contained in Appendix A. Appendix B provides an alternative format for the scale, which has not been fully validated.

Each item is scored from 0 (none of the time; I didn't do this at all) to 4 (all of the time), and the four items for each behaviour are summed to produce a total score ranging from 0 to 16.

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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Individuals scoring 2 or above on the alcohol, marijuana, cocaine, gambling, video gaming, sex, over eating and over working scales are considered “cases”. Individuals scoring 1 or above on the tobacco and shopping scales are considered cases. As with all screening instruments, further assessment is warranted to confirm a formal diagnosis.

Scores may be prorated if one of the 4 items is omitted or marked as “don't know/prefer not to say”. Prorating is by the standard formulae $((\text{person's total out of } 3 \times 4) / 3)$

Behaviours can be omitted from the scale as desired.

Behaviours (e.g., exercise) or substances (opioids) should only be added to the scale if additional validation data are collected prior to or concurrent with the change.

The following table is reprinted from the technical report and provides the Area under the Curve (AUC), 95% confidence intervals for AUC, optimal cut-off scores, and corresponding sensitivity, specificity, positive predictive value(PPV), and negative

predictive value (NPV) for each behaviour broken down by predictor variable. Scores greater than or equal to the cutoff score are used to indicate a positive case. The PPV indicated the proportion of people who are screened as “cases” who also indicated a need to change the behaviour, self-described themselves as having a problem and had actually sought help for the problem. The NPV is the proportion of “non-cases” did not indicated a need for behaviour change, did not self-identify as have a problem, and had not sought help for that problem.

Behaviour	Cutoff	Need for Behaviour Change						Problem Attribution						Help-Seeking					
		AUC	95% CI s	Sensitivity	Specificity	PPV	NPV	AUC	95% CI	Sensitivity	Specificity	PPV	NPV	AUC	95%CI	Sensitivity	Specificity	PPV	NPV
Alcohol	2	.89	.85 - .93	.90	.80	.55	.97	.82	.76 - .88	.75	.74	.38	.93	.94	.91 - .96	1.00	.68	.14	1.00
Tobacco	1	.86	.81 - .91	.90	.72	.73	.89	.86	.81 - .91	.92	.66	.62	.93	.77	.90 - .85	.88	.50	.27	.95
Cannabis	2	.85	.73 - .96	.75	.85	.36	.97	.85	.74 - .95	.73	.88	.48	.95	.76	.52 - .99	.67	.81	.12	.98
Cocaine	2	.88	.80 - .97	1.00	.81	.49	1.00	.91	.84 - .99	1.00	.82	.55	1.00	.90	.82 - .99	1.00	.74	.24	1.00
Gambling	2	.86	.79 - .93	.80	.86	.48	.96	.75	.68 - .82	.59	.86	.54	.89	.91	.80 - 1.00	.91	.80	.15	1.00
Shopping	1	.77	.71 - .82	.83	.66	.44	.92	.80	.73 - .86	.84	.60	.24	.96	.87	.77 - .97	.93	.56	.06	1.00
Gaming	2	.86	.80 - .91	.79	.76	.43	.94	.73	.65 - .80	.58	.73	.40	.85	.81	.68 - .94	.85	.68	.11	.99
Over-eating	2	.83	.79 - .87	.81	.75	.73	.83	.83	.79 - .87	.77	.80	.81	.75	.76	.69 - .83	.84	.54	.19	.96
Sexual Activity	2	.74	.65 - .82	.58	.78	.25	.94	.77	.68 - .87	.69	.78	.22	.97	.81	.68 - .95	.75	.76	.09	.99

Over-working	2	.81	.76 - .85	.84	.68	.55	.90	.77	.72 - .82	.80	.67	.54	.88	.74	.63 - .85	.83	.54	.11	.98
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Table 12 of the technical report.

The following table provides the sensitivity, specificity, NPV, and PPV of all possible threshold scores calculated from the validation data set.

Behaviour	Threshold	Need for Behaviour Change				Problem Attribution				Help Seeking			
		Sensitivity	Specificity	NPV	PPV	Sensitivity	Specificity	NPV	PPV	Sensitivity	Specificity	NPV	PPV
Alcohol	1	0.94	0.67	0.98	0.43	0.83	0.62	0.95	0.31	1.00	0.56	1.00	0.10
	2	0.90	0.80	0.97	0.55	0.75	0.74	0.93	0.38	1.00	0.68	1.00	0.14
	3	0.79	0.86	0.94	0.61	0.70	0.82	0.93	0.45	1.00	0.76	1.00	0.17
	4	0.65	0.89	0.90	0.61	0.69	0.87	0.93	0.53	1.00	0.81	1.00	0.21
	5	0.58	0.92	0.89	0.66	0.61	0.91	0.92	0.57	1.00	0.85	1.00	0.25
	6	0.49	0.95	0.87	0.71	0.53	0.94	0.91	0.63	0.89	0.89	0.99	0.29
	7	0.43	0.96	0.86	0.76	0.47	0.95	0.90	0.68	0.78	0.91	0.99	0.30
	8	0.40	0.97	0.85	0.80	0.44	0.97	0.89	0.74	0.67	0.92	0.98	0.30
	9	0.31	0.98	0.84	0.81	0.36	0.98	0.88	0.77	0.50	0.94	0.97	0.29
	10	0.22	0.99	0.82	0.82	0.30	0.99	0.87	0.86	0.39	0.96	0.97	0.32
	11	0.20	0.99	0.82	0.84	0.27	0.99	0.87	0.89	0.28	0.96	0.96	0.26
	12	0.17	0.99	0.81	0.82	0.23	0.99	0.86	0.88	0.22	0.96	0.96	0.24
	13	0.11	0.99	0.80	0.82	0.17	1.00	0.85	1.00	0.06	0.97	0.95	0.09
	14	0.09	1.00	0.80	0.88	0.13	1.00	0.85	1.00	0.06	0.98	0.95	0.13
	15	0.02	1.00	0.79	0.67	0.05	1.00	0.84	1.00	0.00	0.99	0.95	0.00
Tobacco	1	0.90	0.72	0.89	0.73	0.92	0.66	0.93	0.62	0.88	0.50	0.95	0.27
	2	0.84	0.74	0.84	0.74	0.87	0.70	0.90	0.64	0.85	0.55	0.94	0.29
	3	0.81	0.80	0.83	0.78	0.85	0.75	0.89	0.68	0.85	0.60	0.95	0.31
	4	0.72	0.84	0.78	0.80	0.75	0.80	0.84	0.70	0.80	0.66	0.94	0.33
	5	0.68	0.88	0.76	0.83	0.72	0.83	0.83	0.73	0.75	0.70	0.93	0.34
	6	0.63	0.90	0.74	0.85	0.68	0.87	0.82	0.76	0.73	0.73	0.93	0.37
	7	0.58	0.90	0.71	0.84	0.67	0.89	0.81	0.79	0.68	0.75	0.92	0.36
	8	0.53	0.91	0.69	0.84	0.61	0.90	0.79	0.79	0.65	0.78	0.91	0.38
	9	0.45	0.94	0.66	0.87	0.52	0.93	0.76	0.81	0.58	0.83	0.90	0.42
	10	0.42	0.96	0.66	0.90	0.49	0.95	0.75	0.86	0.55	0.85	0.90	0.44
	11	0.36	0.97	0.64	0.90	0.41	0.95	0.72	0.83	0.45	0.87	0.88	0.42
	12	0.30	0.97	0.61	0.89	0.33	0.95	0.70	0.80	0.40	0.89	0.87	0.44
	13	0.28	0.98	0.61	0.94	0.31	0.96	0.69	0.84	0.38	0.91	0.87	0.47
	14	0.23	0.98	0.60	0.92	0.27	0.98	0.69	0.88	0.33	0.93	0.87	0.48
	15	0.16	0.98	0.57	0.89	0.20	0.99	0.67	0.89	0.18	0.93	0.84	0.35
	16	0.11	0.98	0.56	0.86	0.09	0.99	0.65	0.86	0.13	0.95	0.83	0.33

Cannabis	1	0.81	0.80	0.97	0.32	0.77	0.82	0.96	0.41	0.67	0.76	0.98	0.10
	2	0.75	0.85	0.97	0.36	0.73	0.88	0.95	0.48	0.67	0.81	0.98	0.12
	3	0.75	0.87	0.97	0.40	0.73	0.90	0.95	0.53	0.67	0.83	0.98	0.13
	4	0.69	0.90	0.96	0.44	0.68	0.93	0.95	0.60	0.67	0.86	0.98	0.16
	5	0.69	0.91	0.96	0.46	0.68	0.93	0.95	0.63	0.67	0.87	0.99	0.17
	6	0.69	0.93	0.96	0.52	0.64	0.95	0.94	0.67	0.67	0.89	0.99	0.19
	7	0.56	0.94	0.95	0.50	0.59	0.96	0.94	0.72	0.67	0.91	0.99	0.22
	9	0.44	0.96	0.94	0.54	0.50	0.99	0.92	0.85	0.50	0.93	0.98	0.23
	10	0.31	0.96	0.92	0.50	0.36	0.99	0.91	0.80	0.17	0.94	0.97	0.10
	11	0.31	0.97	0.93	0.56	0.36	0.99	0.91	0.89	0.17	0.95	0.97	0.11
	12	0.19	0.98	0.91	0.50	0.27	1.00	0.89	1.00	0.17	0.97	0.97	0.17
	13	0.19	0.99	0.91	0.60	0.23	1.00	0.89	1.00	0.17	0.97	0.97	0.20
	14	0.13	1.00	0.91	1.00	0.09	1.00	0.87	1.00	0.17	0.99	0.97	0.50
	16	0.06	1.00	0.90	1.00	0.05	1.00	0.87	1.00	0.17	1.00	0.97	1.00
Cocaine	1	1.00	0.80	1.00	0.47	1.00	0.81	1.00	0.53	1.00	0.73	1.00	0.24
	3	1.00	0.82	1.00	0.50	1.00	0.84	1.00	0.56	1.00	0.75	1.00	0.25
	5	0.88	0.86	0.97	0.54	0.89	0.88	0.97	0.62	1.00	0.81	1.00	0.31
	6	0.75	0.86	0.95	0.50	0.78	0.88	0.95	0.58	1.00	0.83	1.00	0.33
	8	0.63	0.86	0.93	0.45	0.67	0.88	0.93	0.55	1.00	0.85	1.00	0.36
	9	0.50	0.89	0.91	0.44	0.56	0.91	0.91	0.56	0.75	0.88	0.98	0.33
	11	0.38	0.89	0.89	0.38	0.44	0.91	0.89	0.50	0.50	0.88	0.95	0.25
	12	0.25	0.91	0.87	0.33	0.33	0.93	0.87	0.50	0.50	0.92	0.96	0.33
	13	0.13	0.91	0.85	0.20	0.22	0.93	0.85	0.40	0.25	0.92	0.94	0.20
	14	0.13	0.93	0.85	0.25	0.22	0.95	0.85	0.50	0.25	0.94	0.94	0.25
	15	0.00	0.95	0.84	0.00	0.11	0.98	0.84	0.50	0.00	0.96	0.92	0.00
Gambling	1	0.83	0.78	0.97	0.38	0.66	0.79	0.89	0.46	0.91	0.72	1.00	0.12
	2	0.80	0.86	0.96	0.48	0.59	0.86	0.89	0.54	0.91	0.80	1.00	0.15
	3	0.70	0.90	0.95	0.54	0.49	0.90	0.87	0.57	0.91	0.85	1.00	0.19
	4	0.60	0.93	0.93	0.59	0.41	0.92	0.85	0.60	0.82	0.88	0.99	0.22
	5	0.50	0.98	0.92	0.77	0.30	0.96	0.83	0.69	0.73	0.93	0.99	0.31
	6	0.45	0.98	0.92	0.78	0.28	0.97	0.83	0.74	0.73	0.95	0.99	0.35
	7	0.43	0.98	0.91	0.81	0.26	0.98	0.83	0.76	0.73	0.95	0.99	0.38
	8	0.43	0.99	0.91	0.85	0.25	0.98	0.83	0.75	0.73	0.96	0.99	0.40
	9	0.25	1.00	0.89	1.00	0.15	1.00	0.81	0.90	0.45	0.98	0.98	0.50
	10	0.23	1.00	0.89	1.00	0.13	1.00	0.81	0.89	0.45	0.99	0.98	0.56
	12	0.20	1.00	0.88	1.00	0.11	1.00	0.81	0.88	0.36	0.99	0.97	0.50
	13	0.13	1.00	0.88	1.00	0.08	1.00	0.80	1.00	0.18	0.99	0.97	0.40
	14	0.08	1.00	0.87	1.00	0.05	1.00	0.80	1.00	0.09	0.99	0.96	0.33
	15	0.05	1.00	0.87	1.00	0.03	1.00	0.79	1.00	0.09	1.00	0.96	0.50
Shopping	1	0.83	0.66	0.92	0.44	0.60	0.84	0.96	0.24	0.93	0.56	1.00	0.06
	2	0.60	0.78	0.86	0.47	0.75	0.71	0.94	0.29	0.93	0.71	1.00	0.09
	3	0.46	0.86	0.83	0.51	0.84	0.62	0.94	0.37	0.86	0.80	0.99	0.12
	4	0.36	0.89	0.81	0.51	0.88	0.53	0.93	0.41	0.79	0.85	0.99	0.14
	5	0.34	0.93	0.81	0.62	0.92	0.47	0.92	0.46	0.64	0.89	0.99	0.15
	6	0.25	0.96	0.80	0.64	0.96	0.43	0.92	0.60	0.57	0.92	0.99	0.19

	7	0.21	0.97	0.79	0.68	0.96	0.34	0.91	0.59	0.50	0.94	0.98	0.21
	8	0.17	0.97	0.78	0.63	0.97	0.29	0.90	0.57	0.43	0.94	0.98	0.20
	9	0.08	0.97	0.77	0.50	0.98	0.16	0.89	0.50	0.14	0.96	0.97	0.11
	10	0.05	0.98	0.76	0.43	0.98	0.10	0.88	0.43	0.14	0.97	0.97	0.14
	11	0.05	0.98	0.76	0.45	0.98	0.09	0.88	0.45	0.14	0.98	0.97	0.18
	12	0.02	0.99	0.76	0.33	0.99	0.07	0.88	0.67	0.07	0.99	0.97	0.17
	13	0.01	0.99	0.76	0.33	1.00	0.03	0.87	0.67	0.07	1.00	0.97	0.33
	15	0.00	1.00	0.75	0.00	1.00	0.02	0.87	1.00	0.00	1.00	0.97	0.00
Gaming	1	0.92	0.65	0.97	0.38	0.72	0.63	0.88	0.37	0.85	0.56	0.99	0.08
	2	0.79	0.76	0.94	0.43	0.58	0.73	0.85	0.40	0.85	0.68	0.99	0.11
	3	0.75	0.83	0.94	0.51	0.57	0.81	0.86	0.48	0.85	0.75	0.99	0.14
	4	0.70	0.87	0.93	0.54	0.51	0.85	0.85	0.50	0.77	0.78	0.99	0.14
	5	0.64	0.91	0.92	0.62	0.45	0.88	0.84	0.54	0.77	0.83	0.99	0.18
	6	0.57	0.93	0.90	0.64	0.43	0.92	0.84	0.61	0.77	0.86	0.99	0.21
	7	0.43	0.94	0.88	0.62	0.34	0.93	0.82	0.59	0.54	0.89	0.98	0.18
	8	0.32	0.95	0.86	0.59	0.26	0.94	0.81	0.59	0.38	0.91	0.97	0.17
	9	0.25	0.96	0.85	0.57	0.23	0.97	0.81	0.68	0.31	0.93	0.97	0.17
	10	0.17	0.96	0.83	0.50	0.20	0.98	0.80	0.76	0.23	0.94	0.96	0.17
	11	0.13	0.97	0.83	0.50	0.15	0.99	0.79	0.77	0.23	0.96	0.96	0.21
	12	0.11	0.98	0.83	0.55	0.12	0.99	0.79	0.80	0.23	0.97	0.96	0.27
	13	0.06	0.99	0.82	0.50	0.06	1.00	0.78	0.80	0.08	0.98	0.96	0.17
	14	0.06	0.99	0.82	0.60	0.05	1.00	0.77	0.75	0.00	0.98	0.95	0.00
	15	0.06	1.00	0.82	0.75	0.03	1.00	0.77	0.67	0.00	0.99	0.95	0.00
Eating	1	0.89	0.61	0.83	0.72	0.91	0.56	0.88	0.64	0.90	0.37	0.97	0.16
	2	0.77	0.80	0.75	0.81	0.81	0.75	0.83	0.73	0.84	0.54	0.96	0.19
	3	0.63	0.86	0.67	0.84	0.68	0.82	0.75	0.76	0.78	0.65	0.96	0.22
	4	0.50	0.91	0.61	0.86	0.54	0.87	0.69	0.78	0.70	0.74	0.95	0.26
	5	0.41	0.93	0.58	0.87	0.46	0.91	0.67	0.81	0.60	0.79	0.94	0.27
	6	0.34	0.96	0.56	0.90	0.38	0.94	0.64	0.85	0.52	0.84	0.93	0.30
	7	0.29	0.96	0.54	0.89	0.34	0.96	0.63	0.87	0.46	0.86	0.93	0.30
	8	0.23	0.97	0.52	0.90	0.27	0.97	0.61	0.87	0.38	0.89	0.92	0.31
	9	0.15	0.98	0.50	0.88	0.18	0.98	0.58	0.88	0.28	0.93	0.91	0.35
	10	0.12	1.00	0.50	0.97	0.14	1.00	0.58	0.97	0.22	0.96	0.90	0.39
	11	0.09	1.00	0.49	1.00	0.11	1.00	0.57	1.00	0.14	0.97	0.90	0.35
	12	0.07	1.00	0.48	1.00	0.09	1.00	0.56	1.00	0.10	0.97	0.89	0.31
	13	0.04	1.00	0.48	1.00	0.05	1.00	0.55	1.00	0.10	0.99	0.89	0.56
	14	0.03	1.00	0.47	1.00	0.04	1.00	0.55	1.00	0.06	0.99	0.89	0.43
	15	0.02	1.00	0.47	1.00	0.03	1.00	0.55	1.00	0.06	0.99	0.89	0.60
	16	0.01	1.00	0.47	1.00	0.01	1.00	0.54	1.00	0.02	1.00	0.89	0.50
Sex	1	0.70	0.75	0.97	0.18	0.70	0.70	0.95	0.22	0.83	0.68	0.99	0.07
	2	0.78	0.69	0.97	0.22	0.58	0.78	0.94	0.25	0.75	0.76	0.99	0.09
	3	0.84	0.59	0.96	0.25	0.51	0.84	0.93	0.29	0.58	0.82	0.98	0.09
	4	0.87	0.47	0.95	0.24	0.44	0.87	0.93	0.30	0.58	0.86	0.99	0.11
	5	0.90	0.47	0.95	0.30	0.42	0.91	0.93	0.36	0.58	0.89	0.99	0.14
	6	0.93	0.38	0.94	0.31	0.35	0.93	0.92	0.38	0.50	0.92	0.98	0.16

	7	0.95	0.34	0.94	0.35	0.28	0.95	0.91	0.39	0.50	0.94	0.98	0.20
	8	0.97	0.34	0.94	0.48	0.26	0.97	0.91	0.48	0.42	0.95	0.98	0.22
	9	0.98	0.34	0.94	0.61	0.23	0.98	0.91	0.56	0.42	0.97	0.98	0.28
	10	0.98	0.31	0.94	0.63	0.23	0.98	0.91	0.63	0.42	0.97	0.98	0.31
	11	0.99	0.28	0.94	0.64	0.21	0.99	0.91	0.64	0.42	0.98	0.98	0.36
	12	0.99	0.22	0.94	0.70	0.14	0.99	0.90	0.60	0.33	0.98	0.98	0.40
	13	1.00	0.13	0.93	0.80	0.09	1.00	0.90	0.80	0.17	0.99	0.97	0.40
	14	1.00	0.09	0.93	1.00	0.07	1.00	0.90	1.00	0.08	0.99	0.97	0.33
	15	1.00	0.03	0.92	1.00	0.02	1.00	0.89	1.00	0.00	1.00	0.97	0.00
Work	1	0.88	0.54	0.90	0.48	0.93	0.57	0.95	0.50	0.83	0.42	0.97	0.09
	2	0.80	0.67	0.88	0.54	0.84	0.68	0.90	0.55	0.83	0.54	0.98	0.11
	3	0.70	0.72	0.83	0.55	0.71	0.72	0.84	0.55	0.75	0.61	0.97	0.12
	4	0.57	0.80	0.80	0.58	0.58	0.80	0.80	0.58	0.71	0.71	0.97	0.14
	5	0.49	0.87	0.78	0.64	0.50	0.87	0.79	0.64	0.67	0.78	0.97	0.17
	6	0.39	0.88	0.75	0.62	0.41	0.90	0.76	0.65	0.50	0.82	0.96	0.16
	7	0.27	0.91	0.72	0.60	0.30	0.93	0.74	0.66	0.38	0.87	0.95	0.16
	8	0.25	0.94	0.72	0.67	0.27	0.95	0.74	0.73	0.38	0.89	0.95	0.20
	9	0.21	0.95	0.71	0.68	0.22	0.96	0.72	0.70	0.33	0.91	0.95	0.21
	10	0.17	0.96	0.70	0.66	0.19	0.96	0.72	0.71	0.29	0.93	0.95	0.22
	11	0.13	0.98	0.70	0.73	0.14	0.98	0.71	0.76	0.21	0.95	0.95	0.23
	12	0.11	0.98	0.70	0.74	0.12	0.98	0.70	0.74	0.17	0.96	0.94	0.21
	13	0.07	0.99	0.69	0.82	0.08	0.99	0.70	0.82	0.13	0.98	0.94	0.27
	14	0.05	1.00	0.68	0.86	0.05	1.00	0.69	0.86	0.13	0.99	0.94	0.43
	15	0.04	1.00	0.68	1.00	0.04	1.00	0.69	1.00	0.08	0.99	0.94	0.40
	16	0.02	1.00	0.68	1.00	0.03	1.00	0.69	1.00	0.04	0.99	0.94	0.33

Table of possible threshold scores with corresponding sensitivity, specificity, NPV and PPV. Scores greater than or equal the threshold indicate a positive case.

Permission to Use

The BSBA can be used freely with appropriate citation of its source. Do not cite this brief user's guide as the instrument source as it is unpublished.

The developers would appreciate being informed about any research applications as these results will be helpful in providing further evidence of the validity of the scale.

Source Citation

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Appendix A

Brief Screener for Behavioural Addictions

1. Think about the statement, “**I did it too much.**” In the last 12 months, how often did this apply to you:

a) Alcohol use (*including beer, wine, and/or hard liquor*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) Tobacco use (*including cigarettes, cigars, chew, cigarillos, and any other tobacco products*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) Cannabis use (*including marijuana, hashish, hash oil, weed, grass, or pot*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) Cocaine use (*including crack, powder cocaine, blow, snow, or snort*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
------------------	----------------------	------------------	------------------	-----------------	-------------------------	----------------------------------

e) Gambling (*including playing slot machines, online gambling, casino games, lotteries, scratch tickets, and any other betting for money*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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f) Shopping (*including in store and online shopping*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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g) Video gaming (including playing video games such as X-Box, Wii, Playstation, and other online or offline video games)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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h) Overeating (more than is needed for day-to-day living)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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i) Sexual activity (excessive sexual activity and/or inappropriate use of pornography, whether online or offline)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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j) Overworking (in paid or volunteer work)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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2. Think about the statement, "**Once I started, I couldn't stop.**" In the last 12 months, how often did this apply to you:

a) Alcohol use (including beer, wine, and/or hard liquor)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) Tobacco use (including cigarettes, cigars, chew, cigarillos, and any other tobacco products)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) Cannabis use (including marijuana, hashish, hash oil, weed, grass, or pot)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) Cocaine use (including crack, powder cocaine, blow, snow, or snort)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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e) Gambling (including playing slot machines, online gambling, casino games, lotteries, scratch tickets, and any other betting for money)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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f) Shopping (including in store and online shopping)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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g) Video gaming (including playing video games such as X-Box, Wii, Playstation, and other online or offline video games)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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h) Overeating (more than is needed for day-to-day living)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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i) Sexual activity (excessive sexual activity and/or inappropriate use of pornography, whether online or offline)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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j) Overworking (in paid or volunteer work)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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3. Think about the statement, "**I felt I had to do it in order to function.**" In the last 12 months, how often did this apply to you:

a) Alcohol use (including beer, wine, and/or hard liquor)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) Tobacco use (including cigarettes, cigars, chew, cigarillos, and any other tobacco products)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) Cannabis use (including marijuana, hashish, hash oil, weed, grass, or pot)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) Cocaine use (including crack, powder cocaine, blow, snow, or snort)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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e) Gambling (including playing slot machines, online gambling, casino games, lotteries, scratch tickets, and any other betting for money)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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f) Shopping (*including in store and online shopping*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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g) Video gaming (*including playing video games such as X-Box, Wii, Playstation, and other online or offline video games*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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h) Overeating (*more than is needed for day-to-day living*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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i) Sexual activity (*excessive sexual activity and/or inappropriate use of pornography, whether online or offline*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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j) Overworking (*in paid or volunteer work*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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4. Think about the statement, "**I continued to do it, even though it caused problems.**" In the last 12 months, how often did this apply to your:

a) Alcohol use (*including beer, wine, and/or hard liquor*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
------------------	----------------------	------------------	------------------	-----------------	-------------------------	-------------------------------

b) Tobacco use (including cigarettes, cigars, chew, cigarillos, and any other tobacco products)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) Cannabis use (including marijuana, hashish, hash oil, weed, grass, or pot)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) Cocaine use (including crack, powder cocaine, blow, snow, or snort)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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e) Gambling (including playing slot machines, online gambling, casino games, lotteries, scratch tickets, and any other betting for money)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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f) Shopping (including in store and online shopping)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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g) Video gaming (including playing video games such as X-Box, Wii, Playstation, and other online or offline video games)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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h) Overeating (*more than is needed for day-to-day living*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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i) Sexual activity (*excessive sexual activity and/or inappropriate use of pornography, whether online or offline*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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j) Overworking (*in paid or volunteer work*)

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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Each item response is scored on a likert scale: 0 = None of the time, 1 = A little of the time, 2 = Some of the time, 3 = Most of the time, and 4 = All of the time. NA = I didn't do this at all, NA = Don't know/prefer not to say. To obtain behaviour subscale total scores, sum the 4 sub-questions for each specific behaviour. E.g. Alcohol subscale total score = 1.a + 2.a + 3.a + 4.a.

Appendix B

Brief Screener for Behavioural Addictions

1. Think about the following statements. In the last 12 months, how often did each statement apply to your **alcohol use** (including beer, wine, and/or hard liquor)?

a) "I did it too much."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) "Once I started, I couldn't stop."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) "I felt I had to do it in order to function."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) "I continued to do it, even though it caused problems."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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2. Think about the following statements. In the last 12 months, how often did each statement apply to your **tobacco use** (including cigarettes, cigars, chew, cigarillos, and any other tobacco products)?

a) "I did it too much."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) "Once I started, I couldn't stop."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) "I felt I had to do it in order to function."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) "I continued to do it, even though it caused problems."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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3. Think about the following statements. In the last 12 months, how often did each statement apply to your **cannabis use** (including marijuana, hashish, hash oil, weed, grass, or pot)?

a) "I did it too much."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) "Once I started, I couldn't stop."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) "I felt I had to do it in order to function."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) "I continued to do it, even though it caused problems."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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4. Think about the following statements. In the last 12 months, how often did each statement apply to your **cocaine use** (including crack, powder cocaine, blow, snow, or snort)?

a) **“I did it too much.”**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) **“Once I started, I couldn't stop.”**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) **“I felt I had to do it in order to function.”**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) **“I continued to do it, even though it caused problems.”**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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5. Think about the following statements. In the last 12 months, how often did each statement apply to your **gambling** (including playing slot machines, online gambling, casino games, lotteries, scratch tickets, and any other betting for money)?

a) **“I did it too much.”**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) **“Once I started, I couldn't stop.”**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) **“I felt I had to do it in order to function.”**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) "I continued to do it, even though it caused problems."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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6. Think about the following statements. In the last 12 months, how often did each statement apply to your **shopping** (including in store and online shopping)?

a) "I did it too much."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) "Once I started, I couldn't stop."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) "I felt I had to do it in order to function."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) "I continued to do it, even though it caused problems."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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7. Think about the following statements. In the last 12 months, how often did each statement apply to your **video gaming** (including playing video games such as X-Box, Wii, Playstation, and other online or offline video games)?

a) "I did it too much."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
------------------	----------------------	------------------	------------------	-----------------	-------------------------	----------------------------------

b) "Once I started, I couldn't stop."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) "I felt I had to do it in order to function."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
------------------	----------------------	------------------	------------------	-----------------	-------------------------	----------------------------------

d) "I continued to do it, even though it caused problems."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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8. Think about the following statements. In the last 12 months, how often did each statement apply to your **overeating** (*more than is needed for day-to-day living*)?

a) "I did it too much."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
------------------	----------------------	------------------	------------------	-----------------	-------------------------	----------------------------------

b) "Once I started, I couldn't stop."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) "I felt I had to do it in order to function."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
------------------	----------------------	------------------	------------------	-----------------	-------------------------	----------------------------------

d) "I continued to do it, even though it caused problems."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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9. Think about the following statements. In the last 12 months, how often did each statement apply to your **sexual activity** (*excessive sexual activity and/or inappropriate use of pornography, whether online or offline*)?

a) **"I did it too much."**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) **"Once I started, I couldn't stop."**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) **"I felt I had to do it in order to function."**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) **"I continued to do it, even though it caused problems."**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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10. Think about the following statements. In the last 12 months, how often did each statement apply to your **overworking** (*in paid or volunteer work*)?

a) **"I did it too much."**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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b) **"Once I started, I couldn't stop."**

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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c) "I felt I had to do it in order to function."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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d) "I continued to do it, even though it caused problems."

None of the time	A little of the time	Some of the time	Most of the time	All of the time	I didn't do this at all	Don't know/ prefer not to say
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Each item response is scored on a likert scale: 0 = None of the time, 1 = A little of the time, 2 = Some of the time, 3 = Most of the time, and 4 = All of the time. NA = I didn't do this at all, NA = Don't know/prefer not to say. To obtain behaviour subscale total scores, sum the 4 questions for each specific behaviour.