

Methods

Obsessive Compulsive Drinking scale (OCDS) short version

The OCDS was administered in a brief version including only 5 items from the original scale (de Wildt et al. 2005). The items were rated from zero to four with increasing severity and summed to a total score. The items from the original scale included were:

1. How much of your time when you're not drinking is occupied by ideas, thoughts, impulses, or images related to drinking?
2. How frequently do these thoughts occur?
3. How much distress or disturbance do these ideas, thoughts, impulses, or images related to drinking cause you when you're not drinking?
4. How much of an effort do you make to resist these thoughts or try to disregard or turn your attention away from these thoughts as they enter your mind when you're not drinking?
5. How strong is the drive to consume alcoholic beverages?

Table legends

Table S1. Results from the linear regression models investigating the association between family history of alcohol abuse and self-rated impulsivity measured by the Barratt Impulsiveness Scale (BIS) motor impulsivity subscale score, with increasing adjustment for sociodemographic and clinical covariates.

Table S2. Results from the linear regression models investigating the association between family history of alcohol abuse and self-rated impulsivity measured by the Barratt Impulsiveness Scale (BIS) attentional impulsivity subscale score, with increasing adjustment for sociodemographic and clinical covariates.

Table S3. Results from the linear regression models investigating the association between family history of alcohol abuse and self-rated impulsivity measured by the Barratt Impulsiveness Scale (BIS) non-planning impulsivity subscale score, with increasing adjustment for sociodemographic and clinical covariates.

Table S4. Results from the linear regression models investigating the association between family history of alcohol abuse and Rapid Visual Processing task outcome probability of hit, with increasing adjustment for sociodemographic and clinical covariates.

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Table S6. Results from the linear regression models investigating the association between family history of alcohol abuse and Digit span total score, with increasing adjustment for sociodemographic and clinical covariates.

Table S7. Results from the linear regression models investigating the association between family history of alcohol abuse and Digit span forward score, with increasing adjustment for sociodemographic and clinical covariates.

Table S8. Results from the linear regression models investigating the association between family history of alcohol abuse and Digit span backward score, with increasing adjustment for sociodemographic and clinical covariates.

Table S1. Results from the linear regression models investigating the association between family history of alcohol abuse and self-rated impulsivity measured by the Barratt Impulsiveness Scale (BIS) motor impulsivity subscale score, with increasing adjustment for sociodemographic and clinical covariates.

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE(B)</i>	β
Family History	1.18 [†]	0.70	0.13	1.27 [†]	0.71	0.14	1.26 [†]	0.71	0.14
Age	-0.11**	0.03	-0.25	-0.05	0.04	-0.13	-0.05	0.04	-0.12
Sex	0.20	0.70	0.02	0.47	0.69	0.06	0.49	0.70	0.06
Study site	-0.32	0.70	-0.04	-1.05	0.77	-0.13	-1.0	0.84	-0.12
TLFB90 drinkingdays				0.01	0.01	0.03	0.00	0.01	0.03
OCDS				0.22 [†]	0.11	0.16	0.22 [†]	0.12	0.16
Age of onset				-0.08*	0.03	-0.22	-0.08*	0.03	-0.22
Nicotine							0.18	0.70	0.02
Depression							0.01	0.39	0.00
<i>R</i> ²	0.075			0.155			0.156		
Adjusted <i>R</i> ²	0.054			0.118			0.107		
<i>F</i> (df); p-value	F(4,176)=3.58; p=0.008			F(7,159)=5.05; p<0.001			F(9,157)=3.844; p<0.01		

[†] $p < 0.1$; * $p < .05$; ** $p < .01$; *** $p < 0.001$

TLFB-90–timeline followback interview assessment of percentage of drinking days during the last 90 days; OCDS–Obsessive Compulsive Drinking Scale brief version. Age of onset–self-reported age when alcohol started to become a problem. Depression–assessed by self-rating using the Beck Depression Inventory (Belgian site) and Montgomery-Åsberg Depression Self-Rating Scale (Swedish site).

Table S2. Results from the linear regression models investigating the association between family history of alcohol abuse and self-rated impulsivity measured by the Barratt Impulsiveness Scale (BIS) attentional impulsivity subscale score, with increasing adjustment for sociodemographic and clinical covariates.

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE(B)</i>	β
Family History	0.92	0.64	0.11	1.25†	0.66	0.14	1.35*	0.63	0.16
Age	-0.06†	0.03	-0.15	-0.01	0.04	-0.03	-0.00	0.04	0.00
Sex	0.37	0.63	0.05	0.56	0.64	0.07	0.56	0.62	0.07
Study site	-1.80**	0.64	-0.23	-2.73***	0.71	-0.35	-1.56*	0.74	-0.20
TLFB90 drinkingdays				0.01	0.01	0.06	-0.00	0.01	0.04
OCDS				0.27*	0.10	0.22	0.18†	0.10	0.15
Age of onset				-0.05	0.03	-0.16	-0.05	0.03	-0.15
Nicotine							0.71	0.61	0.09
Depression							1.41***	0.35	0.31
<i>R</i> ²	0.089			0.164			0.249		
Adjusted <i>R</i> ²	0.068			0.128			0.207		
<i>F</i> (df); p-value	F(4,180)=4.382 p=0.002			F(7,162)=4.54; p<0.001			F(9,160)=5.89; p<0.001		

† $p < 0.1$; * $p < .05$; ** $p < .01$; *** $p < 0.001$

TLFB-90—timeline followback interview assessment of percentage of drinking days during the last 90 days; OCDS—Obsessive Compulsive Drinking Scale brief version. Age of onset—self-reported age when alcohol started to become a problem. Depression—assessed by self-rating using the Beck Depression Inventory (Belgian site) and Montgomery-Åsberg Depression Self-Rating Scale (Swedish site).

Table S3. Results from the linear regression models investigating the association between family history of alcohol abuse and self-rated impulsivity measured by the Barratt Impulsiveness Scale (BIS) non-planning impulsivity subscale score, with increasing adjustment for sociodemographic and clinical covariates.

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE(B)</i>	β
Family History	2.09*	0.93	0.17	2.18*	0.97	0.17	2.30*	0.97	0.18
Age	-0.12*	0.05	-0.20	-0.01	0.06	-0.01	-0.01	0.06	-0.01
Sex	-0.40	0.91	-0.03	0.09	0.94	0.01	-0.06	0.94	-0.01
Study site	-1.74	0.93	-0.16	-2.73**	1.04	-0.24	-2.25*	1.13	-0.20
TLFB90 drinkingdays				0.01	0.02	0.03	0.00	0.02	0.02
OCDS				0.27	0.15	0.14	0.23	0.16	0.12
Age of onset				-0.15**	0.05	-0.29	-0.14**	0.05	-0.28
Nicotine							-0.57	0.94	-0.05
Depression							0.94 [†]	0.53	0.14
<i>R</i> ²	0.094			0.181			0.229		
Adjusted <i>R</i> ²	0.074			0.145			0.189		
<i>F</i> (df); p-value	F(4,180)=4.66; p=0.001			F(7,162)=5.102; p<0.001			F(9,176)=5.80; p<0.001		

[†] $p < 0.1$; * $p < .05$; ** $p < .01$; *** $p < 0.001$

TLFB-90—timeline followback interview assessment of percentage of drinking days during the last 90 days; OCDS—Obsessive Compulsive Drinking Scale brief version. Age of onset—self-reported age when alcohol started to become a problem. Depression—assessed by self-rating using the Beck Depression Inventory (Belgian site) and Montgomery-Åsberg Depression Self-Rating Scale (Swedish site).

Table S4. Results from the linear regression models investigating the association between family history of alcohol abuse and Rapid Visual Processing task outcome probability of hit, with increasing adjustment for sociodemographic and clinical covariates.

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE(B)</i>	β
Family History	-0.04	0.03	-0.08	-0.03	0.04	-0.07	-0.03	0.04	-0.06
Age	-0.01**	0.00	-0.23	-0.01*	0.00	-0.24	-0.01*	0.00	-0.24
Sex	-0.03	0.03	-0.06	-0.04	0.04	-0.08	-0.04	0.04	-0.09
Study site	-0.02	0.03	0.04	0.03	0.04	0.06	0.03	0.04	0.07
TLFB90 drinkingdays				0.00	0.00	0.00	0.00	0.00	0.00
OCDS				-0.01	0.01	-0.10	-0.01	0.01	-0.11
Age of onset				0.00	0.00	0.05	0.00	0.00	0.05
Nicotine							-0.03	0.04	-0.06
Depression							0.02	0.02	0.07
R^2	0.065			0.064			0.071		
Adjusted R^2	0.045			0.024			0.019		
F (df); p-value	F(4,182)=3.187;p=0.01			F(7,162)=1.59;p=0.14			F(9,159)=1.36;p=0.21		

† $p < 0.1$; * $p < .05$; ** $p < .01$; *** $p < 0.001$

TLFB-90—timeline followback interview assessment of percentage of drinking days during the last 90 days; OCDS—Obsessive Compulsive Drinking Scale brief version. Age of onset—self-reported age when alcohol started to become a problem. Depression—assessed by self-rating using the Beck Depression Inventory (Belgian site) and Montgomery-Åsberg Depression Self-Rating Scale (Swedish site).

Table S5. Results from the linear regression models investigating the association between family history of alcohol abuse and Rapid Visual Processing task outcome mean latency in millisecond, with increasing adjustment for sociodemographic and clinical covariates.

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE(B)</i>	β
Family History	4.97	17.85	0.02	23.25	16.62	0.11	23.99	16.79	0.12
Age	2.34*	0.91	0.20	1.46	0.97	0.15	1.43	0.98	0.14
Sex	23.58	17.88	0.10	26.70	16.49	0.14	27.63	16.74	0.14
Study site	-28.63	17.95	-0.13	-14.89	18.26	-0.08	-13.49	19.99	-0.07
TLFB90 drinkingdays				-0.31	0.29	-0.08	-0.29	0.29	-0.08
OCDS				0.05	2.67	0.00	-0.22	2.75	-0.01
Age of onset				0.01	0.79	0.00	0.02	0.80	0.00
Nicotine							-3.23	16.69	-0.02
Depression							2.10	9.39	0.02
<i>R</i> ²	0.047			0.057			0.060		
Adjusted <i>R</i> ²	0.026			0.016			0.006		
<i>F</i> (df); p-value	F(4,180)=2.22; p=0.07			F(7,160)=1.39; p=0.21			F(9,157)=1.11; p=0.36		

† $p < 0.1$; * $p < .05$; ** $p < .01$; *** $p < 0.001$

TLFB-90—timeline followback interview assessment of percentage of drinking days during the last 90 days; OCDS—Obsessive Compulsive Drinking Scale brief version. Age of onset—self-reported age when alcohol started to become a problem. Depression—assessed by self-rating using the Beck Depression Inventory (Belgian site) and Montgomery-Åsberg Depression Self-Rating Scale (Swedish site).

Table S6. Results from the linear regression models investigating the association between family history of alcohol abuse and Digit span total score, with increasing adjustment for sociodemographic and clinical covariates.

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE(B)</i>	β
Family History	0.18	0.52	0.03	0.21	0.57	0.03	0.16	0.57	0.02
Age	-0.07**	0.03	-0.21	-0.07*	0.03	-0.19	-0.07*	0.03	-0.19
Sex	-0.05	0.52	-0.01	-0.10	0.56	-0.02	0.03	0.56	0.00
Study site	1.92***	0.53	0.30	2.00**	0.62	0.31	1.91**	0.68	0.30
TLFB90 drinkingdays				0.00	0.01	0.03	0.00	0.01	0.04
OCDS				-0.08	0.09	-0.07	-0.06	0.09	-0.06
Age of onset				0.01	0.03	0.02	0.01	0.03	0.02
Nicotine							0.45	0.56	0.06
Depression							-0.35	0.32	-0.09
R^2	0.091			0.076			0.091		
Adjusted R^2	0.071			0.037			0.041		
F (df); p-value	F(4,186)=4.63;p<0.01			F(7,166)=1.956;p=0.06			F(9,163)=1.815;p=0.07		

† $p < 0.1$; * $p < .05$; ** $p < .01$; *** $p < 0.001$

TLFB-90—timeline followback interview assessment of percentage of drinking days during the last 90 days; OCDS—Obsessive Compulsive Drinking Scale brief version. Age of onset—self-reported age when alcohol started to become a problem. Depression—assessed by self-rating using the Beck Depression Inventory (Belgian site) and Montgomery-Åsberg Depression Self-Rating Scale (Swedish site).

Table S7. Results from the linear regression models investigating the association between family history of alcohol abuse and Digit span forward score, with increasing adjustment for sociodemographic and clinical covariates.

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE(B)</i>	β
Family History	0.30	0.29	0.07	0.34	0.31	0.08	0.33	0.32	0.08
Age	-0.04*	0.01	-0.18	-0.03	0.02	-0.16	-0.03	0.02	-0.16
Sex	0.08	0.29	0.02	0.09	0.31	0.02	0.15	0.31	0.04
Study site	1.21***	0.29	0.33	1.32***	0.35	0.36	1.30***	0.38	0.35
TLFB90 drinkingdays				-0.00	0.01	-0.02	-0.00	0.01	-0.02
OCDS				-0.07	0.05	-0.12	-0.07	0.05	-0.11
Age of onset				0.00	0.01	0.02	0.00	0.01	0.02
Nicotine							0.15	0.31	0.04
Depression							-0.12	0.18	-0.05
<i>R</i> ²	0.122			0.117			0.127		
Adjusted <i>R</i> ²	0.103			0.080			0.078		
<i>F</i> (df); p-value	F(4,186)=6.47; p<0.001			F(7,166)=3.142; p<0.01			F(9,163)=2.62; p=0.<0.01		

† $p < 0.1$; * $p < .05$; ** $p < .01$; *** $p < 0.001$

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Table S8. Results from the linear regression models investigating the association between family history of alcohol abuse and Digit span backward score, with increasing adjustment for sociodemographic and clinical covariates.

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE(B)</i>	β
Family History	-0.12	0.33	-0.03	-0.14	0.36	-0.03	-0.17	0.36	-0.04
Age	-0.04*	0.02	-0.17	-0.04†	0.02	-0.16	-0.03	0.02	-0.16
Sex	-0.13	0.33	-0.03	-0.20	0.36	-0.05	-0.12	0.36	-0.03
Study site	0.71*	0.33	0.18	0.67†	0.40	0.17	0.61	0.43	0.15
TLFB90 drinkingdays				0.01	0.01	0.07	0.01	0.01	0.07
OCDS				-0.01	0.06	-0.01	0.00	0.06	0.00
Age of onset				-0.00	0.02	0.01	0.00	0.02	0.01
Nicotine							0.31	0.36	0.07
Depression							-0.23	0.21	-0.09
R^2	0.036			0.032			0.045		
Adjusted R^2	0.015			-0.001			-0.007		
<i>F</i> (df); <i>p</i> -value	F(4,186)=1.74; <i>p</i> =0.14			F(7,166)=0.8077; <i>p</i> =0.582			F(9,163)=0.86; <i>p</i> =0.56		

† $p < 0.1$; * $p < .05$; ** $p < .01$; *** $p < 0.001$

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