

Supplementary Information.

Extends tables 6, 8, 10 and 12 in the main submission by providing further information regarding model fitting concerning the intercept and first model permutations, including all potential predictor variables initially considered, arising from the ordinal logistic regression analyses.

Table 6 (extended): Results of ordinal logistic regression analysis for SASNOS Total and Interpersonal Relationships (domain and subdomains)

Domains & Subdomains	Model	Model Fitting Information				Goodness-of-Fit*		Test of Parallel Lines*	
		Variables in model	-2 Log Likelihood	Chi-square (df) p	Pseudo R ²		Chi-square (df) p	Chi-square (df) p	
SASNOS Total Score									
	Intercept	Sex YEd WTAR LDH	168.01						
	First model	NH BDI DEX	106.41	61.61 (7) <.001	.655	Pearson	98.43 (125) .962		
	Final model	DEX	101.61	68.37 (1) <.001	.624	Deviance	78.56 (125) 1.00	4.03 (2) .134	
Interpersonal Relationships									
	Intercept		200.40						
	First model	Sex TSI BDI DEX	155.23	45.18 (4) <.001	.490	Pearson	200.17 (216) .773		
	Final model	Sex BDI DEX	158.87	42.64 (3) <.001	.465	Deviance	157.58 (216) .999	3.89 (6) .692	
<i>- Social Interaction</i>									
	Intercept		211.15						
	First model	Sex TSI LDH DEX	175.12	36.04 (4) <.001	.399	Pearson	113.33 (125) .289		
	Final model	DEX	146.50	29.14 (1) <.001	.326	Deviance	114.67 (125) .736	1.87 (2) .392	
<i>- Relationships</i>									
	Intercept		193.56						
	First model	Sex LDH PH BDI DEX	159.74	33.84 (5) <.001	.399	Pearson	113.30 (125) .765		
	Final model	DEX	139.89	26.24 (1) <.001	.301	Deviance	104.36 (125) .960	2.01 (2) .366	
<i>- Engagement</i>									
	Intercept		197.85						
	First model	Sex LDH NH BDI DEX	154.78	43.07 (5) <.001	.477	Pearson	191.13 (216) .888		
	Final model	Sex BDI DEX	164.12	38.17 (3) <.001	.427	Deviance	162.73 (216) .997	7.45 (6) .281	

Note: *Final model only; YEd – years of education; WTAR – Wechsler Test of Adult Reading FSIQ; LDH – Learning Difficulty History pre-TBI; NH – Neurological History pre-TBI; PH – Psychiatric History pre-TBI; BDI – Beck Depression Inventory; DEX – Dysexecutive Questionnaire Proxy Rating.

Table 8 (extended): Results of ordinal logistic regression analysis for Cognition and Inhibition (domain and subdomains)

Domain and Subdomains	Model	Model Fitting Information			Pseudo R ²	Goodness-of-Fit*		Test of Parallel Lines*
		Variables in model	-2 Log Likelihood	Chi-square (df) p		Chi-square (df) p	Chi-square (df) p	
Cognition								
	Intercept		189.88					
	First model	Sex LDH NH BDI DEX	139.78	50.10 (5) <.001	.536	Pearson	192.80 (154) .018	
	Final model	Sex DEX	138.81	51.04 (2) <.001	.507	Deviance	120.34 (154) .979	2.19 (4) .700
<i>- Executive Function</i>								
	Intercept		198.04					
	First model	Sex BDI DEX	172.03	26.02 (3) <.001	.315	Pearson	106.74 (125) .880	
	Final model	DEX	142.56	23.77 (1) <.001	.277	Deviance	108.18 (125) .858	1.76 (2) .415
<i>- Attention & Memory</i>								
	Intercept	Sex Rel LDH NH IQ	159.26					
	First model	DEX	122.52	36.74 (6) <.001	.452	Pearson	187.61 (154) .034	
	Final model	Sex DEX	125.05	47.03 (2) <.001	.493	Deviance	113.25 (154) .994	2.68 (4) .614
Inhibition								
	Intercept		55.07					
	First model	TSI LDH NH BAI DEX	21.30	33.77 (5) <.001	.703	Pearson	27.17 (83) 1.00	
	Final model	DEX	21.53	26.96 (1) <.001	.561	Deviance	15.17 (83) 1.00	3.56 (1) .059
<i>- Sexual</i>								
	Intercept		28.59					
	First model	TSI LDH BAI DEX	12.18	16.41 (4) .003	.623	Pearson	15.99 (83) 1.00	
	Final model	DEX	14.31	12.90 (1) <.001	.484	Deviance	12.69 (83) 1.00	0.01 (1) .969
<i>- Social</i>								
	Intercept		141.72					
	First model	LDH MH NH DEX	110.34	31.39 (4) <.001	.384	Pearson	67.60 (125) 1.00	
	Final model	DEX	95.64	27.73 (1) <.001	.340	Deviance	69.24 (125) 1.00	0.02 (2) .992

Note: *Final models only; Rel – in relationship post-TBI; IQ – Wechsler Test of Adult Reading estimated FSIQ; LDH – Learning Difficulty History pre-TBI; NH – Neurological History pre-TBI; MH – Relevant Medical History pre-TBI ; BDI – Beck Depression Inventory; DEX – Dysexecutive Questionnaire Proxy Rating; TSI – time since injury; BAI – Beck Anxiety Inventory

Table 10 (extended): Results of ordinal logistic regression analysis for Aggression (domain and subdomains)

Domain & Subdomains	Model	Model Fitting Information			Pseudo R ²	Goodness-of-Fit*		Test of Parallel Lines*
		Variables in model	-2 Log Likelihood	Chi-square (df) p		Chi-square (df) p	Chi-square (df) p	
Aggression	Intercept		132.69					
	First model	LDH YEd DEX	100.65	32.04 (3) <.001	.424	Pearson	73.79 (125) 1.00	
	Final model	DEX	91.19	33.25 (1) <.001	.396	Deviance	68.37 (125) 1.00	91.19 (2) <.001
- Provocative Behaviour	Intercept		105.29					
	First model	LDH YEd DEX	84.52	20.77 (3) <.001	.326	Pearson	69.65 (83) .852	
	Final model	DEX	77.88	22.47 (1) <.001	.313	Deviance	63.96 (83) .940	0.09 (1) .762
- Irritability	Intercept		187.62					
	First model	Rel LDH NH YEd DEX	162.15	25.47 (5) <.001	.324	Pearson	138.94 (125) .186	
	Final model	DEX	141.68	26.18 (1) <.001	.299	Deviance	105.68 (125) .894	2.17 (2) .339
- Overt Aggression	Intercept		83.96					
	First model	MH YEd DEX	65.33	18.63 (3) <.001	.326	Pearson	126.80 (145) .859	
	Final model	MH DEX	66.04	18.19 (2) <.001	.304	Deviance	61.41 (145) 1.00	3.94 (4) .479

Note: *Final models only; YEd – years of education; Rel – in relationship post-TBI; LDH – Learning Difficulty History pre-TBI; NH – Neurological History pre-TBI; MH – Relevant Medical History pre-TBI; DEX – Dysexecutive Questionnaire Proxy Rating.

Table 12(extended): Results of ordinal logistic regression analysis for Communication (domain and subdomains)

Domain/subdomain	Model	Model Fitting Information				Goodness-of-Fit*		Test of Parallel Lines*
		Variables in model	-2 Log Likelihood	Chi-square (df) p	Pseudo R ²	Chi-square (df) p	Chi-square (df) p	
Communication								
	Intercept		90.04			Pearson	157.66 (143) .190	
	Final model	TSI BDI DEX	86.21	3.83 (3) .281	.072	Deviance	86.21 (143) 1.00	0.70 (3) .874
<i>- Speech & Language</i>								
	Intercept		161.64					
	First model	Age BDI DEX	151.741	9.90 (3) .019	.140	Pearson	214.94 (235) .822	
	Final model	Age DEX	159.33	9.53 (2) .009	.128	Deviance	159.33 (235) 1.00	10.13 (4) .038
<i>- Mental State</i>								
	Intercept		31.56			Pearson	84.30 (74) .194	
	Final model	TSI DEX	24.56	6.70 (2) .030	.258	Deviance	24.56 (74) 1.00	0.02 (2) .992

*Final models only; TSI – time since injury; BDI – Beck Depression Inventory; DEX – Dysexecutive Questionnaire Proxy Rating.