

Practical Significance – Probabilities of choosing a particular response category under the corresponding model

	Cognition									
	Threshold Invariance Model					Residual Invariance Model				
	C0	C1	C2	C3	C4	C0	C1	C2	C3	C4
<i>3 months post TBI</i>										
Concentration	0.04	0.09	0.19	0.41	0.27	0.04	0.09	0.20	0.42	0.26
Expression	0.02	0.06	0.15	0.41	0.36	0.02	0.06	0.15	0.42	0.37
Memory	0.04	0.11	0.23	0.36	0.26	0.04	0.11	0.24	0.36	0.25
Solutions	0.03	0.06	0.15	0.37	0.40	0.02	0.06	0.15	0.38	0.39
Decisions	0.02	0.06	0.16	0.40	0.35	0.02	0.06	0.16	0.40	0.35
Navigate	0.02	0.04	0.12	0.35	0.47	0.02	0.04	0.12	0.35	0.47
Speed	0.03	0.07	0.21	0.40	0.30	0.02	0.07	0.21	0.40	0.29
<i>6 months post TBI</i>										
Concentration	0.03	0.09	0.20	0.44	0.24	0.03	0.09	0.20	0.43	0.25
Expression	0.02	0.05	0.15	0.42	0.36	0.02	0.05	0.15	0.42	0.36
Memory	0.04	0.11	0.24	0.36	0.25	0.04	0.11	0.23	0.36	0.24
Solutions	0.02	0.06	0.15	0.40	0.39	0.02	0.06	0.15	0.38	0.39
Decisions	0.02	0.06	0.16	0.40	0.35	0.02	0.06	0.16	0.40	0.35
Navigate	0.02	0.04	0.12	0.35	0.47	0.02	0.04	0.12	0.36	0.47
Speed	0.02	0.06	0.22	0.42	0.28	0.02	0.07	0.22	0.41	0.29

Note. Response Categories: C0 = "Not at all"; C1 = "Slightly"; C2 = "Moderately"; C3 = "Quite"; C4 = "Very".

	Self									
	Loadings Invariance Model					Threshold Invariance Model				
	C0	C1	C2	C3	C4	C0	C1	C2	C3	C4
<i>3 months post TBI</i>										
Energy	0.06	0.14	0.27	0.36	0.18	0.06	0.14	0.27	0.36	0.17
Motivation	0.04	0.11	0.25	0.38	0.21	0.04	0.11	0.26	0.39	0.21
Self-Esteem	0.04	0.10	0.22	0.39	0.25	0.04	0.10	0.22	0.39	0.24
Appearance	0.04	0.09	0.23	0.43	0.21	0.04	0.09	0.24	0.43	0.20
Achievements	0.04	0.07	0.16	0.36	0.37	0.04	0.07	0.16	0.37	0.36
Perception	0.03	0.08	0.21	0.44	0.23	0.03	0.08	0.21	0.45	0.23
Future	0.04	0.09	0.22	0.41	0.24	0.04	0.11	0.24	0.38	0.24
<i>6 months post TBI</i>										
Energy	0.06	0.13	0.26	0.36	0.19	0.06	0.13	0.26	0.35	0.19
Motivation	0.04	0.11	0.24	0.38	0.23	0.04	0.11	0.24	0.38	0.24
Self-Esteem	0.04	0.10	0.21	0.38	0.27	0.04	0.10	0.21	0.38	0.27
Appearance	0.04	0.09	0.23	0.43	0.22	0.04	0.09	0.22	0.42	0.23
Achievements	0.04	0.07	0.15	0.36	0.38	0.04	0.07	0.15	0.35	0.39
Perception	0.03	0.08	0.20	0.44	0.25	0.03	0.08	0.20	0.43	0.26
Future	0.04	0.09	0.21	0.41	0.25	0.04	0.09	0.21	0.40	0.26

Note. Response Categories: C0 = "Not at all"; C1 = "Slightly"; C2 = "Moderately"; C3 = "Quite"; C4 = "Very".

Daily Life & Autonomy

	Threshold Invariance Model					Residual Invariance Model				
	C0	C1	C2	C3	C4	C0	C1	C2	C3	C4
<i>3 months post TBI</i>										
Extent of Ind.	0.03	0.07	0.15	0.38	0.36	0.03	0.07	0.16	0.37	0.37
Out and About	0.05	0.07	0.13	0.29	0.46	0.05	0.06	0.14	0.30	0.45
Domestic Act.	0.05	0.07	0.15	0.32	0.41	0.05	0.08	0.16	0.30	0.42
Finances	0.09	0.07	0.13	0.26	0.45	0.09	0.07	0.13	0.26	0.45
Work/Education	0.10	0.12	0.19	0.32	0.27	0.10	0.12	0.19	0.33	0.26
Social Act.	0.09	0.13	0.22	0.32	0.24	0.08	0.14	0.22	0.31	0.25
Own Life	0.05	0.09	0.18	0.36	0.33	0.04	0.09	0.17	0.36	0.33
<i>6 months post TBI</i>										
Extent of Ind.	0.02	0.06	0.13	0.36	0.42	0.03	0.06	0.127	0.37	0.41
Out and About	0.03	0.05	0.11	0.28	0.52	0.03	0.06	0.11	0.28	0.53
Domestic Act.	0.04	0.06	0.13	0.30	0.47	0.04	0.06	0.12	0.32	0.47
Finances	0.07	0.06	0.12	0.25	0.51	0.07	0.06	0.11	0.25	0.50
Work/Education	0.08	0.10	0.19	0.33	0.31	0.08	0.09	0.19	0.33	0.31
Social Act.	0.07	0.11	0.21	0.33	0.29	0.07	0.10	0.21	0.34	0.29
Own Life	0.03	0.07	0.16	0.37	0.38	0.03	0.07	0.16	0.36	0.38

Note. Response Categories: C0 = "Not at all"; C1 = "Slightly"; C2 = "Moderately"; C3 = "Quite"; C4 = "Very".

Social Relationships

	Loadings Invariance Model					Threshold Invariance Model				
	C0	C1	C2	C3	C4	C0	C1	C2	C3	C4
<i>3 months post TBI</i>										
Affect	0.00	0.02	0.10	0.42	0.46	0.00	0.02	0.10	0.42	0.46
Family	0.02	0.05	0.12	0.32	0.49	0.03	0.05	0.11	0.33	0.49
Friends	0.02	0.04	0.14	0.38	0.43	0.02	0.04	0.14	0.38	0.43
Partner	0.07	0.07	0.13	0.27	0.47	0.07	0.07	0.12	0.28	0.47
Sex	0.14	0.10	0.20	0.29	0.27	0.14	0.10	0.21	0.28	0.27
Attitudes	0.02	0.06	0.17	0.43	0.33	0.02	0.05	0.18	0.43	0.33
<i>6 months post TBI</i>										
Affect	0.00	0.02	0.10	0.40	0.47	0.00	0.03	0.10	0.40	0.47
Family	0.03	0.05	0.12	0.32	0.50	0.02	0.05	0.12	0.31	0.50
Friends	0.02	0.04	0.14	0.37	0.43	0.02	0.05	0.14	0.36	0.43
Partner	0.07	0.06	0.13	0.27	0.48	0.06	0.06	0.14	0.27	0.47
Sex	0.13	0.10	0.21	0.30	0.27	0.13	0.09	0.20	0.31	0.27
Attitudes	0.02	0.05	0.18	0.43	0.32	0.02	0.06	0.17	0.44	0.32

Note. Response Categories: C0 = "Not at all"; C1 = "Slightly"; C2 = "Moderately"; C3 = "Quite"; C4 = "Very".

Emotions

	Threshold Invariance Model					Residual Invariance Model				
	C0	C1	C2	C3	C4	C0	C1	C2	C3	C4
<i>3 months post TBI</i>										
Lonely	0.03	0.09	0.13	0.24	0.50	0.03	0.10	0.13	0.25	0.50
Bored	0.05	0.12	0.16	0.28	0.39	0.05	0.12	0.16	0.29	0.38
Anxious	0.05	0.11	0.16	0.25	0.43	0.05	0.11	0.16	0.25	0.43
Sad	0.06	0.13	0.16	0.24	0.40	0.06	0.13	0.16	0.25	0.39
Angry	0.05	0.10	0.12	0.24	0.48	0.06	0.10	0.12	0.24	0.47
<i>6 months post TBI</i>										
Lonely	0.03	0.09	0.13	0.25	0.51	0.03	0.09	0.13	0.24	0.51
Bored	0.04	0.12	0.16	0.30	0.39	0.05	0.12	0.16	0.29	0.39
Anxious	0.05	0.11	0.16	0.25	0.44	0.05	0.11	0.16	0.25	0.44
Sad	0.06	0.13	0.16	0.25	0.40	0.06	0.13	0.16	0.25	0.41
Angry	0.06	0.10	0.12	0.24	0.48	0.05	0.10	0.12	0.24	0.49

Note. Response Categories: C0 = "Not at all"; C1 = "Slightly"; C2 = "Moderately"; C3 = "Quite"; C4 = "Very".

Physical Problems

	Loadings Invariance Model					Threshold Invariance Model				
	C0	C1	C2	C3	C4	C0	C1	C2	C3	C4
<i>3 months post TBI</i>										
Slow	0.06	0.13	0.14	0.25	0.43	0.06	0.13	0.14	0.25	0.42
Injuries	0.12	0.14	0.14	0.20	0.41	0.12	0.15	0.14	0.19	0.41
Pain	0.06	0.14	0.16	0.28	0.36	0.06	0.13	0.16	0.29	0.36
See/Hear	0.06	0.11	0.13	0.21	0.50	0.06	0.11	0.12	0.20	0.52
Brain	0.08	0.13	0.17	0.27	0.35	0.08	0.12	0.17	0.28	0.35
<i>6 months post TBI</i>										
Slow	0.05	0.11	0.13	0.24	0.47	0.04	0.11	0.13	0.25	0.47
Injuries	0.10	0.13	0.13	0.20	0.45	0.10	0.12	0.12	0.20	0.46
Pain	0.06	0.12	0.15	0.26	0.41	0.06	0.12	0.15	0.26	0.41
See/Hear	0.05	0.10	0.12	0.20	0.54	0.05	0.10	0.12	0.21	0.52
Brain	0.06	0.11	0.16	0.28	0.39	0.06	0.12	0.16	0.27	0.40

Note. Response Categories: C0 = "Not at all"; C1 = "Slightly"; C2 = "Moderately"; C3 = "Quite"; C4 = "Very".

Practical Significance – Discrepancies between invariance models

Cognition

Differences Threshold vs. Residual Model

	Not at all	Slightly	Moderately	Quite	Very
<i>3 months post TBI</i>					
Concentration	0	0	0	0.01	0.01
Expression	0	0	0	0	0
Memory	0	0	0	0	0.01
Solutions	0	0	0	0.01	0.01
Decisions	0	0	0	0.01	0.01
Navigate	0	0	0	0	0
Speed	0	0	0	0.01	0.01
<i>6 months post TBI</i>					
Concentration	0	0	0	0.01	0.01
Expression	0	0	0	0	0
Memory	0	0	0	0	0.01
Solutions	0	0	0	0.01	0.01
Decisions	0	0	0	0.01	0.01
Navigate	0	0	0	0	0
Speed	0	0	0	0.01	0.01

Note. The values represent the differences between the probabilities of choosing a particular response category for the models with different constraints. Multiplying by 100 gives percentages.

Self

Threshold vs. Residual Model

	Not at all	Slightly	Moderately	Quite	Very
<i>3 months post TBI</i>					
Energy	0	0	0	0	0.01
Motivation	0	0	0	0	0.01
Self-Esteem	0	0	0	0.01	0.01
Appearance	0	0	0	0	0.01
Achievements	0	0	0	0.01	0.01
Self-Perception	0	0	0	0.01	0.01
Future	0	0	0	0.01	0.01
<i>6 months post TBI</i>					
Energy	0	0	0	0	0.01
Motivation	0	0	0	0	0.01
Self-Esteem	0	0	0	0.01	0.01
Appearance	0	0	0	0	0.01
Achievements	0	0	0	0.01	0.01
Self-Perception	0	0	0	0.01	0.01
Future	0	0	0	0.01	0.01

Note. The values represent the differences between the probabilities of choosing a particular response category for the models with different constraints. Multiplying by 100 gives percentages.

Daily Life & Autonomy*Threshold vs. Loading Model*

	Not at all	Slightly	Moderately	Quite	Very
<i>3 months post TBI</i>					
Extent of Ind.	0	0	0.01	0.01	0.01
Out and About	0	0	0	0.01	0.01
Domestic Act.	0	0	0.01	0.02	0
Finances	0	0	0	0	0
Work/Education	0	0.01	0	0	0
Social Act.	0	0.01	0.01	0.01	0
Own Life	0	0	0	0	0
<i>6 months post TBI</i>					
Extent of Ind.	0	0	0.01	0.01	0.01
Out and About	0	0	0	0.01	0.01
Domestic Act.	0	0.01	0.01	0.02	0.01
Finances	0.01	0	0	0	0.01
Work/Education	0	0.01	0	0	0
Social Act.	0	0.01	0	0.01	0
Own Life	0	0	0	0	0

Note. The values represent the differences between the probabilities of choosing a particular response category for the models with different constraints. Multiplying by 100 gives percentages.

Social*Differences Loading vs. Threshold Model*

	Not at all	Slightly	Moderately	Quite	Very
<i>3-months post TBI</i>					
Affect	0	0	0	0	0
Family	0	0	0.01	0.01	0.01
Friends	0	0	0	0.01	0
Partner	0	0	0.01	0	0
Sex	0	0	0	0.01	0
Attitudes	0	0	0	0.01	0
<i>6-months post TBI</i>					
Affect	0	0	0	0	0
Family	0.01	0	0.01	0.01	0
Friends	0	0.01	0	0.01	0
Partner	0.01	0.01	0.01	0	0
Sex	0	0.01	0	0.01	0
Attitudes	0	0.01	0.01	0.01	0

Note. The values represent the differences between the probabilities of choosing a particular response category for the models with different constraints. Multiplying by 100 gives percentages.

Emotions*Differences Threshold vs. Residual Model*

	Not at all	Slightly	Moderately	Quite	Very
<i>3 months post TBI</i>					
Lonely	0	0	0	0	0
Bored	0	0	0	0.01	0
Anxious	0	0	0	0	0
Sad	0	0	0	0	0
Angry	0	0	0	0	0
<i>6 months post TBI</i>					
Lonely	0	0	0	0	0
Bored	0	0	0	0.01	0
Anxious	0	0	0	0	0
Sad	0	0	0	0	0
Angry	0	0	0	0	0

Note. The values represent the differences between the probabilities of choosing a particular response category for the models with different constraints. Multiplying by 100 gives percentages.

Physical Problems*Differences Loadings vs. Threshold*

	Not at all	Slightly	Moderately	Quite	Very
<i>3 months post TBI</i>					
Slow	0	0	0	0	0
Injuries	0	0.01	0.01	0.01	0
Pain	0	0	0	0.01	0
Seeing Hearing	0	0	0.01	0.01	0.02
Brain	0	0.01	0	0.01	0
<i>6 months post TBI</i>					
Slow	0.01	0	0	0.01	0
Injuries	0.01	0.01	0.01	0.01	0
Pain	0	0	0	0.01	0
Seeing Hearing	0	0	0.01	0.01	0.02
Brain	0	0.01	0	0.01	0

Note. The values represent the differences between the probabilities of choosing a particular response category for the models with different constraints. Multiplying by 100 gives percentages.