Episodic memory and delayed recall are significantly more impaired in younger patients with deficit schizophrenia than in elderly patients with amnestic mild cognitive impairment.

Short title: deficit schizophrenia and mild cognitive impairment

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Supplementary Material

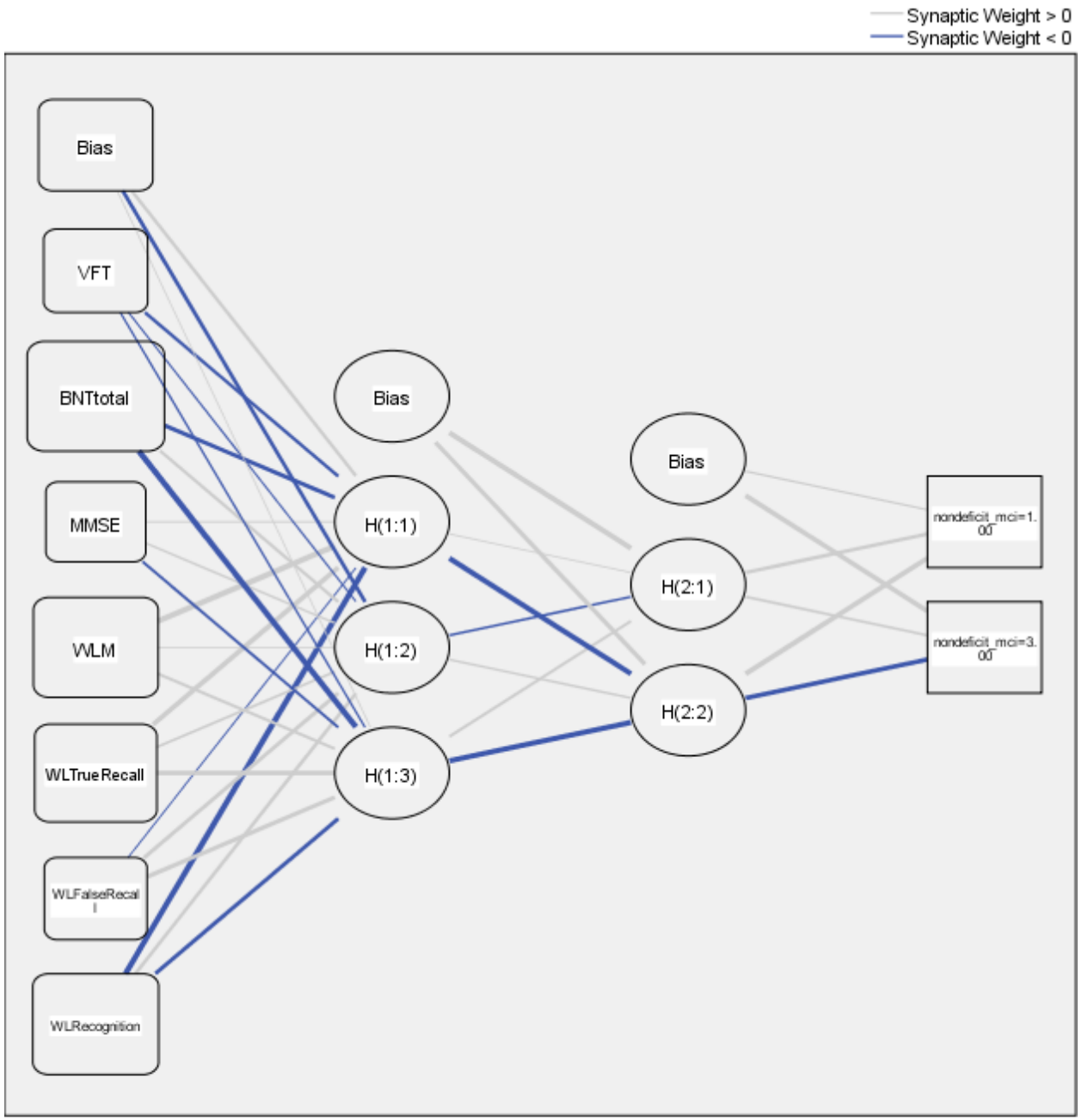
Neural Network Analaysis: Separation Non-deficit schizophrenia and aMCI

Shown are the results of Multilayer Perceptron Neural Network analysis with network information, model summary, parameter estimates, and input variable importance.

Network Information

Input Layer	Covariates	1	VFT
		2	BNTtotal
		3	MMSE
		4	WLM
		5	WL True Recall
		6	WL False Recall
		7	WLRecognition
	Number of Units[a]		7
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		2
	Number of Units in Hidden Layer 1[a]		3
	Number of Units in Hidden Layer 2[a]		2
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	nondeficit_mci
	Number of Units		2
	Activation Function		Identity
	Error Function		Sum of Squares

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Identity

Model Summary

Training	Sum of Squares Error	6.176
	Percent Incorrect Predictions	23.9%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.00
Testing	Sum of Squares Error	2.246
	Percent Incorrect Predictions	18.2%
Holdout	Percent Incorrect Predictions	25.8%

Dependent Variable: nondeficit_mci

a. Error computations are based on the testing sample.

Parameter Estimates

		Predicted						
		Hidden Layer 1			Hidden Layer 2		Output Layer	
Predictor		H(1:1)	H(1:2)	H(1:3)	H(2:1)	H(2:2)	[nondeficit_mci= 1.00]	[nondeficit_mci=3 .00]
Input Layer	(Bias)	.313	-.362	.008				
	VFT	-.293	-.077	-.134				
	BNTtotal	-.417	.287	-1.064				
	MMSE	.069	.198	-.222				
	WLM	.777	.062	.265				
	WLTrueRecall	.558	.211	.465				
	WLFalseRecall	-.062	.394	.424				
	WLRecognition	-.799	.323	-.415				
Hidden Layer 1	(Bias)				.699	.441		
	H(1:1)				.030	-.736		
	H(1:2)				-.200	.199		
	H(1:3)				.252	-.750		
Hidden Layer 2	(Bias)						.118	.537
	H(2:1)						.327	.221
	H(2:2)						.565	-.518

Independent Variable Importance

	Importance	Normalized Importance
VFT	.071	27.4%
BNTtotal	.259	100.0%
MMSE	.048	18.5%
WLM	.189	72.8%
WL True Recall	.174	67.0%
WL False Recall	.063	24.4%
WLRecognition	.196	75.4%