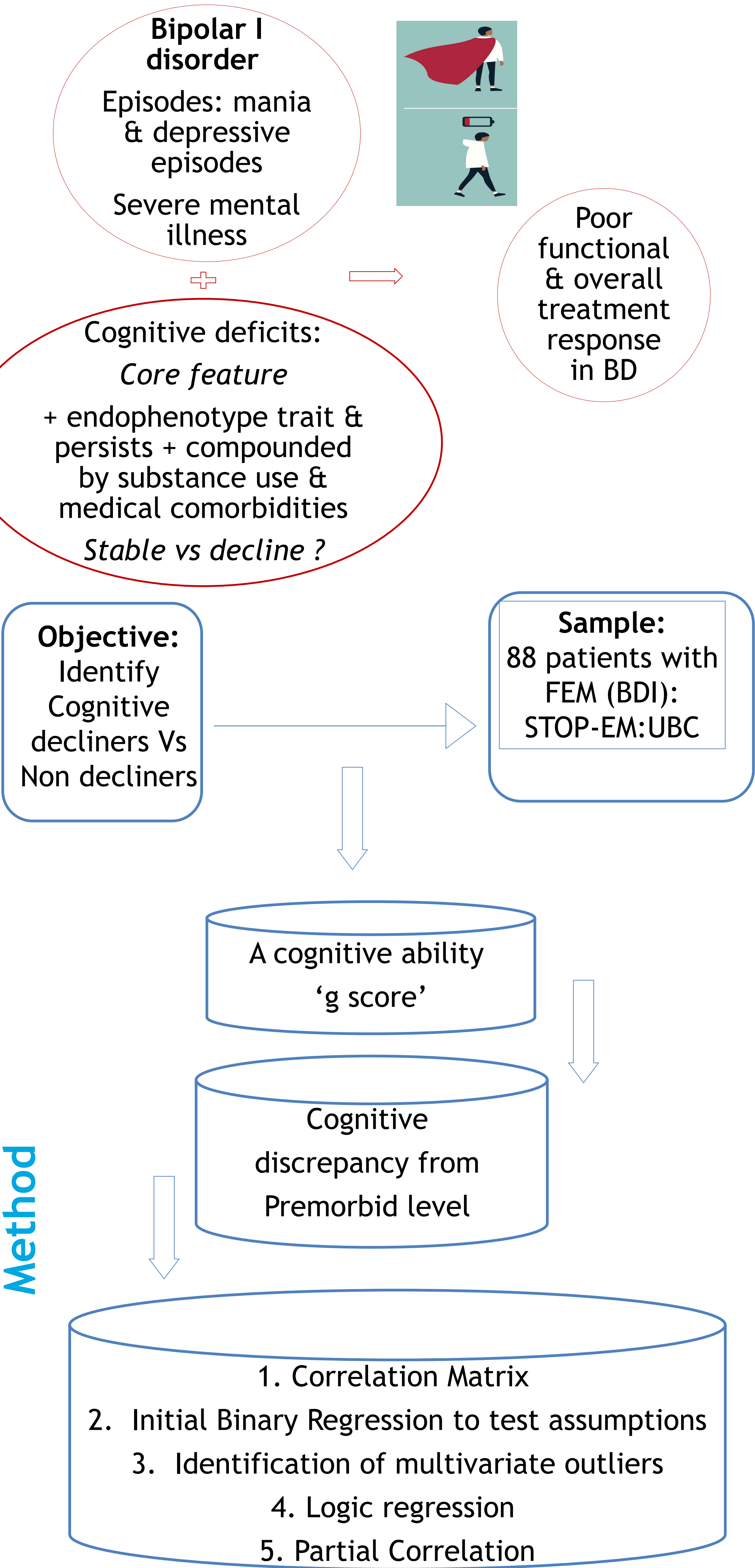


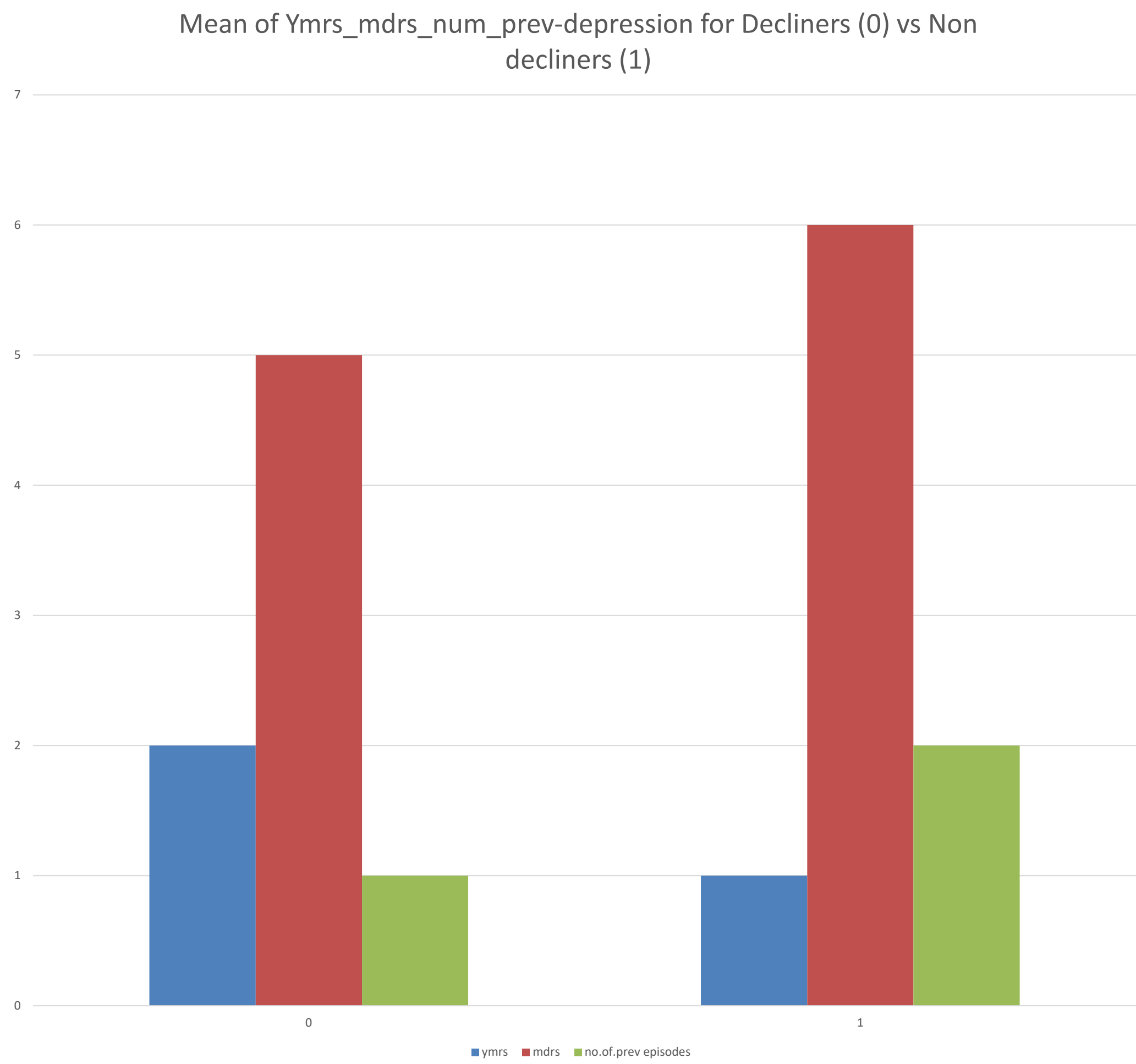
# Putative cognitive decliners versus non decliners in first episode mania

Rajakumari P. Reddy<sup>1</sup>, Ivan J. Torres<sup>1,\*</sup>, Lakshmi Yatham<sup>1</sup>, 1. Dept of Psychiatry, UBC, \*Mental Health and Substance Use Services



## Logistic regression model

Dependent Variable	Cognitive discrepancy scores
	Putative cognitive decline status scores (dichotomous variable as decliners vs non decliners )
Level 1 (core covariate)	Age (22yrs)
Level 2 (secondary covariates/predictors)	Mania symptom severity (1.56)-YMRS
	Depression symptom severity (5.49)-MADRS
	Sex (F:53%, M:46%)
	Race: 76% Caucasian
Level 3 variables (primary predictors)	Number of previous depressive episodes (1.36)
	Psychosis history (70%)
	On Lithium (47%)



## Parameters of the analysis

### Logistic regression & Partial/bivariate correlations)

- General cognitive ability (g): Mean & SD .0000 (1.000) of factor analysis FAC\_1
  - Estimated premorbid IQ scores (mean & SD of zNAART) .020 (1.012)
  - Cognitive discrepancy score (g score - NAART premorbid IQ) .0209(1.07)
  - Putative decliners versus non decliners: cognitive discrepancy score of <-.5 ("decliners," ) & >-.5 as (non-decliners)
- Logistic regression: to assess if any clinical variables would predict decliner vs non decliner status
  - Analysis indicated 31.8 % as decliners

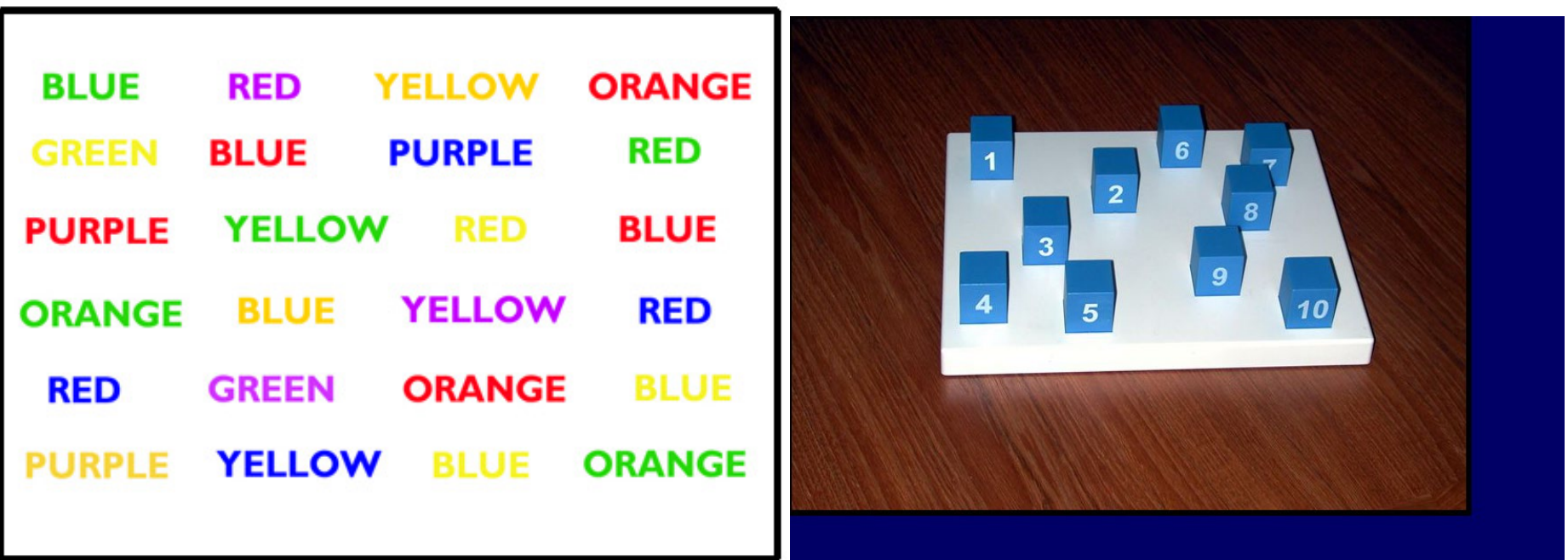
Variables in the Equation								
	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>								
Age of subject at time of screen	-.065	.063	1.054	1	.305	.937	.828	1.061
Sex(1)	.744	.583	1.631	1	.202	2.104	.672	6.591
race(1)	-.257	.694	.137	1	.711	.773	.198	3.016
score of ymrs closest to baseline neurocog	-.177	.099	3.217	1	.073	.838	.691	1.017
score of mdrs closest to baseline neurocog	.059	.047	1.565	1	.211	1.061	.967	1.163
num_previous_depressions	.086	.146	.349	1	.555	1.090	.819	1.450
psychosis_recoded(1)	-.143	.589	.059	1	.809	.867	.273	2.752
onlithium_recoded(1)	-.952	.531	3.219	1	.073	.386	.136	1.092
Constant	2.471	1.428	2.994	1	.084	11.838		

a. Variable(s) entered on step 1: num\_previous\_depressions, psychosis\_recoded, onlithium\_recoded.

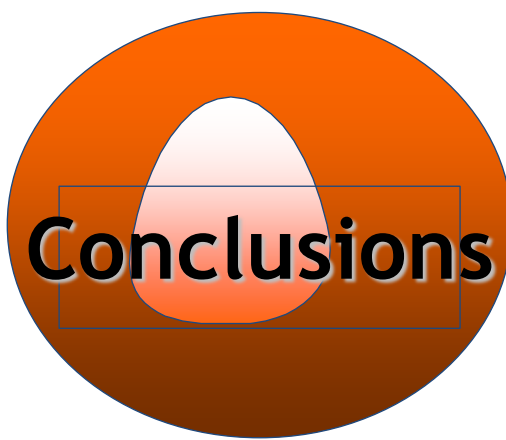
Cognitive discrepancy	age of subject -.228*; race -.218*; lithium -.244*
Age of the subject	race .232*
Race	ymrs .242*
Ymrs	mdrs .302*
Previous depression	psychosis .288*

Correlation is significant at the 0.05 level (2-tailed).  
Youngs Mania rating Scale (ymrs), Montgomery-Åsberg Depression Rating Scale (MADRS)

## Neuropsychological Domains



- ✓ trails B t-score
- ✓ stroop CW t-score
- ✓ letter number sequencing scaled score
- ✓ cvlt 1-5 t-score
- ✓ spatial recognition memory percent correct standard
- ✓ Stockings of Cambridge number of problems solved in minimum moves standard
- ✓ spatial working memory between errors standard



- 32% of cognitive decliners from premorbid function (first episode)
- No consistent clinical predictors of decliners vs non decliners (assessment is still in the early course of illness)
- Periodic & longitudinal assessment would aid

## Reference / Bibliography

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