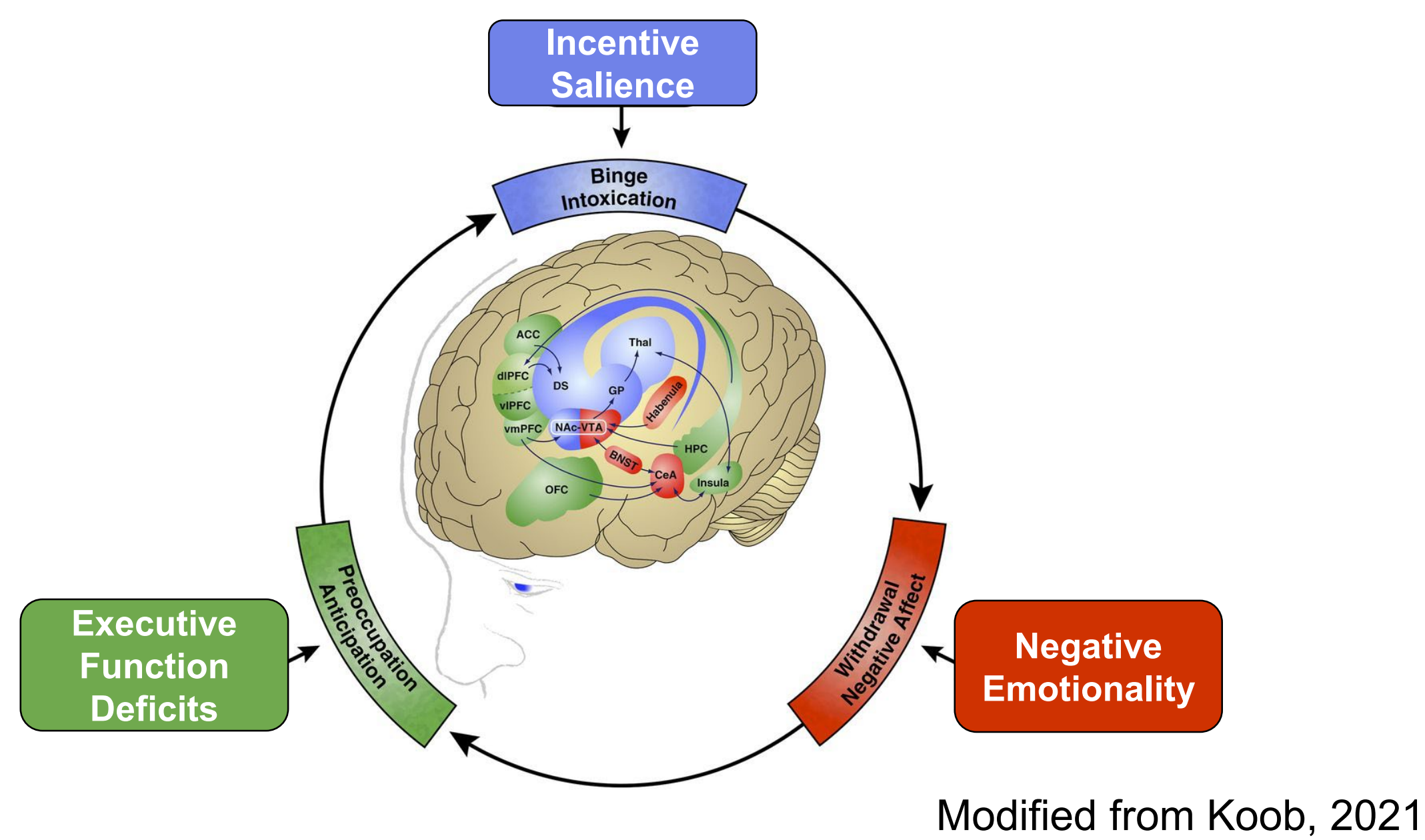


Neurofunctional Domains in Alcohol and Methamphetamine Using Samples

Erica N. Grodin, Steven J. Nieto, ReJoyce Green, Lara A. Ray

Background

- Addictions Neuroclinical Assessment has been proposed as a neuroscience-informed framework to capture three functional domains:



Methods

Participants were individuals with heavy alcohol or methamphetamine use.

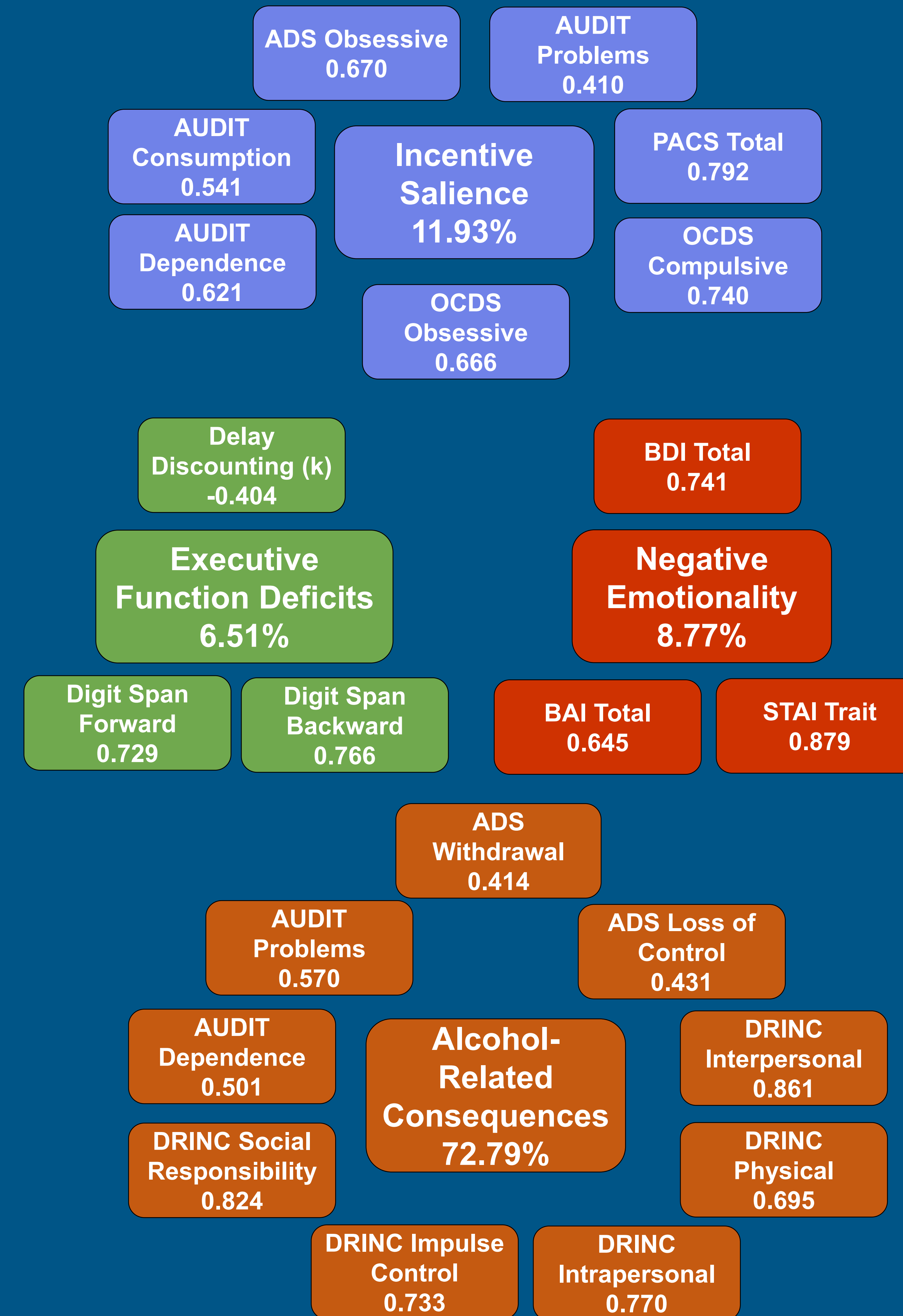
Participants completed a phenotypic battery consisting of sociodemographic, clinical, and behavioral measures.

Exploratory factor analysis (EFA) was used to identify latent factors. Variables with loading ≥ 0.40 were considered to load on a factor.

Conclusions

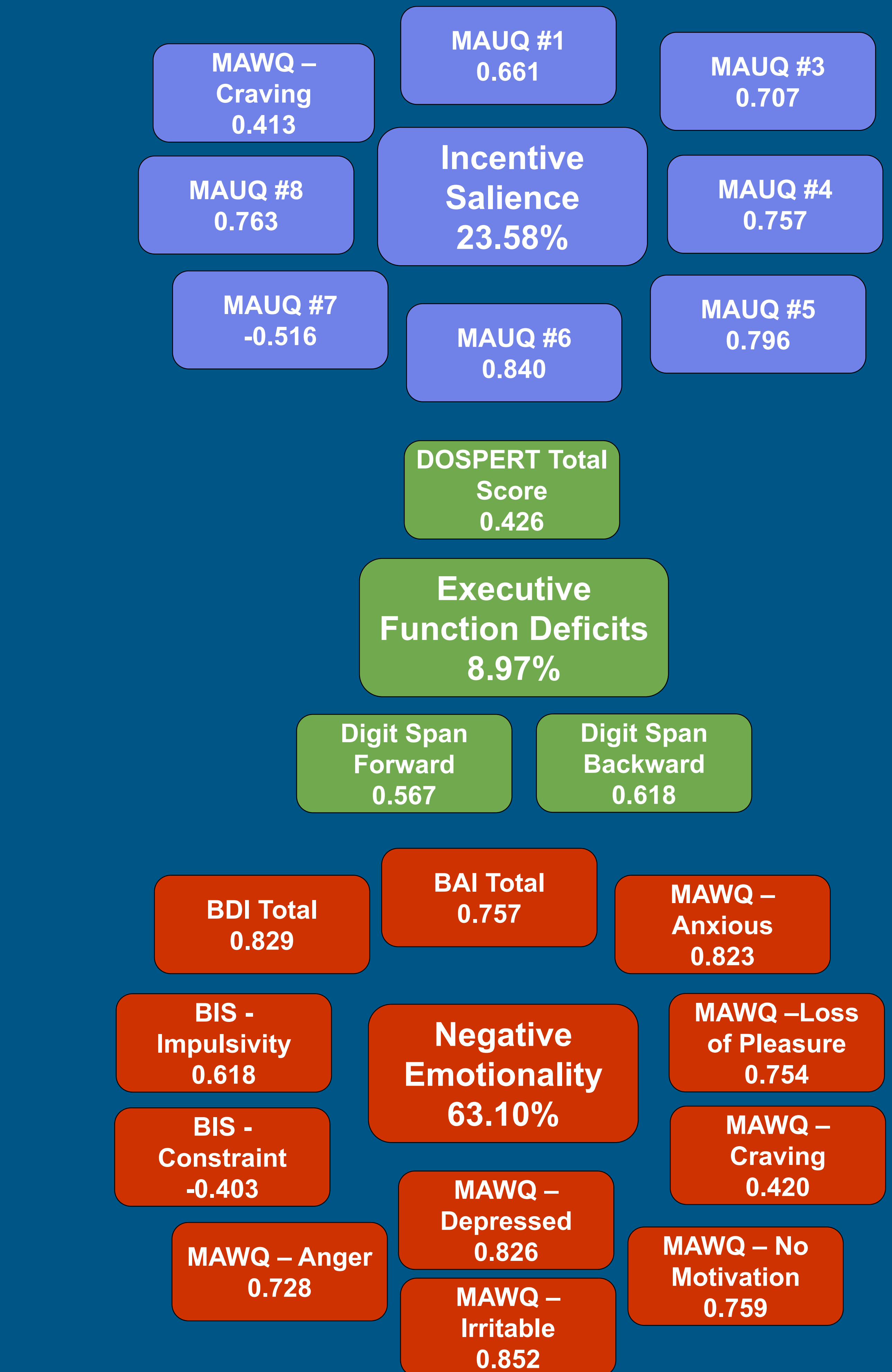
- ANA framework replicated independently.
- Results support the approach to identify neurofunctional constructs in alcohol samples, which can be extended to other substance use disorders.

ANA in Alcohol Drinkers



	Incentive Salience			Negative Emotionality			Executive Function		
	β	SE	p	β	SE	p	β	SE	p
Sex	0.18	0.07	0.01	0.02	0.03	0.84	0.08	0.06	0.19
Age	0.2	0.07	0.005	0.20	0.08	0.02	-0.39	0.05	<0.001
Race	-0.02	0.03	0.44	-0.09	0.08	0.35	-0.34	0.06	<0.001
Age at first drink	-0.17	0.07	0.02	-0.10	0.09	0.23	-0.003	0.04	0.71
FH+	0.33	0.09	<0.001	-0.05	0.09	0.59	-0.28	0.06	<0.001
Drinking Days	0.56	0.06	<0.001	0.27	0.08	0.002	-0.05	0.15	0.77
DPDD	0.41	0.06	<0.001	0.10	0.08	0.25	0.11	0.16	0.49
AUD	0.57	0.06	<0.001	0.22	0.08	0.01	-0.02	0.07	0.82

ANA in Methamphetamine Users



	Incentive Salience		Negative Emotionality		Executive Function	
	r	p	r	p	r	p
Sex	0.02	0.85	-0.04	0.64	-0.07	0.42
Age	0.004	0.96	-0.06	0.48	-0.21	0.02
Age at first use	-0.05	0.58	-0.16	0.08	-0.18	0.05
Symptom Count	0.32	<0.001	0.37	<0.001	0.11	0.23
MA Use Days	0.19	0.03	0.15	0.09	0.06	0.49